RAPPORT

COMITÉ EXÉCUTIF

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de la Commission Européenne de Lutte contre la Fièvre Aphteuse

Soixante et onzième Session

Organisation des Nations Unies pour l'alimentation et l'agriculture

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COMMISSION EUROPEENNE DE LUTTE CONTRE

LA FIEVRE APHTEUSE

RAPPORT

de la

Soixante et onzième session du Comité Exécutif

Siège de la FAO, Rome

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ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE

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INTRODUCTION

Le Comité Exécutif de la Commission européenne de lutte contre la fièvre aphteuse (EUFMD) a tenu sa soixante et onzième session au siège de la FAO à Rome, les 24 et 25 janvier 2005.

Les membres du Comité Exécutif présents étaient : Mme le Dr Karin Schwabenbauer, Allemagne (Présidente); les Drs Tibor Bálint, Hongrie; Sloboden Cokrevski, Ex République Yougoslave de Macédoine ; Romano Marabelli, Italie; Nihat Pakdil, Turquie; Vasilios Stylas, Grèce et Preben Willeberg, Danemark.

Les observateurs suivants étaient présents: les Drs Kris De Clercq (Belgique), Président du Groupe de recherche; Alejandro Schudel, Chef du Département scientifique de l'OIE, Paris; le Prof. Dr Nikola Belev, Président de la Commission régionale de l'OIE pour l'Europe; les Drs Alf-Eckbert Füssel, DG-SANCO; David Paton, LMR. La FAO était représentée par le Dr Joseph Domenech, Chef du Service de la santé animale. D'autres observateurs étaient présents : les Drs Peter De Leeuw, CVO, Pays Bas et Carsten Pötzsch, Consultant EUFMD, Allemagne.

Le Secrétariat était composé par les Drs Keith Sumption (Secrétaire), Dónal Sammin, (Expert associé) et Mme Egiziana Fragiotta (Assistante administrative).

La réunion a été présidée par Mme le Dr Karin Schwabenbauer, Présidente du Comité Exécutif. Elle a ouvert la réunion en souhaitant à tous une année pleine de succès et la bienvenue à Rome. En particulier, elle accueillit le Dr Carsten Pötzsch, consultant recruté pour réaliser un certain nombre de missions dans le Caucase, lequel a été invité pour présenter le rapport de sa première mission sur la vaccination et la surveillance dans la région, ainsi que le Dr Peter de Leeuw, qui a été également invité pour présenter les recommandations faites lors de la Conférence sur « Les coûts matériels et immatériels du contrôle des maladies animales » organisée à Bruxelles en décembre 2004. Elle a aussi fait ressortir l'importance de cette session, la dernière avant la Session générale d'avril: c'était donc la dernière opportunité pour préparer des propositions ou des recommandations pour la prochaine session.

La parole a été donnée au Dr Joseph Domenech, qui a souhaité aux participants la bienvenue à la FAO, Rome, de la part du Directeur général et de Mme Louise Fresco, Sous Directrice générale, Département de l'agriculture. Il a souligné encore l'importance de cette session et souhaité à tous une réunion couronnée de succès.

Point 1. Adoption de l'ordre du jour

L'ordre du jour a été adopté tel que présenté **(Annexe 1)**. Il a été proposé de discuter les points 3, 4 et 5, concernant la stratégie, le financement et le programme de travail pendant le deuxième jour.

Point 2. Mise à jour depuis la 70ème session

Rapport de la réunion tripartite pour les Balkans

Le Dr Keith Sumption présenta les recommandations de la réunion tripartite FAO/OIE/CE tenue à Sofia en novembre 2004, sur le contrôle de la fièvre aphteuse et d'autres maladies exotiques dans la région des Balkans **(Annexe 2)**. La réunion avait été très opportune pour discuter de la situation épidémiologique, du fait qu'elle eut lieu une semaine après qu'une mission dans la région ait été réalisée pour enquêter sur le premier foyer de Peste des petits ruminants (PPR) survenu en Thrace.

Bien que la PPR ne fut pas la première préoccupation de la Commission EUFMD, l'extension de la PPR d'Anatolie jusqu'en Thrace devrait être prise au sérieux, en tant qu'un indicateur de

la faiblesse du contrôle des mouvements des animaux qui pourrait être suivie par d'autres infections incluant la fièvre aphteuse.

Keith Sumption attira l'attention sur l'importance des accords conclus, incluant la déclaration sans délai des maladies de la "liste A" survenant ou réapparaissant dans la région de Thrace, et sur les décisions prises lors de la réunion.

Le Comité Exécutif a fortement soutenu la mise en œuvre des recommandations contenues dans le rapport de la réunion tripartite. Suite à une discussion, les conclusions et recommandations suivantes furent adoptées:

Concernant la PPR:

- La Direction générale de la protection et du contrôle (DGPC) du Gouvernement de Turquie est encouragée à mener à bien le plan de gestion d'urgence pour la PPR et à communiquer ce plan aux pays voisins et aux organisations internationales.
- La campagne de vaccination proposée pour contrôler la PPR en Thrace devrait s'accompagner du marquage permanent des animaux vaccinés.
- Le développement d'un vaccin marqué pour la PPR est requis d'urgence afin de permettre la mise en œuvre d'une stratégie DIVA dans les pays affectés de manière endémique et dans les zones à risque.

Sur la déclaration des maladies:

- En plus de la déclaration sans délai des cas confirmés à l'OIE et aux pays voisins, un "système d'alarme" est encouragé, par la notification aux CVO des pays voisins.

Sur la surveillance dans la région de Thrace en 2005:

- Un plan de séro-surveillance révisé pour la Thrace devrait être développé, prenant en considération les besoins différents pour la surveillance de la fièvre aphteuse, de la PPR et de la fièvre catarrhale (BT), pour la détection précoce de l'infection tout au long des périodes de risque.
- Le brouillon de plan de séro-surveillance (**Annexe 3**) développé par la Commission EUFMD avec des apports du Groupe de recherche et d'experts de l'Institut SAP à Ankara, devrait être considéré comme une base potentielle pour l'action en 2005. La faisabilité du plan, ainsi que les exigences de la surveillance de la PPR et de la BT devraient être revus. S'il en est besoin, un soutien financier devrait être identifié.

Rapport de la Turquie – la fièvre aphteuse et les autres maladies infectieuses majeures des animaux

Le Dr Pakdil présenta le rapport (**Annexe 4**). Il indiqua que la DGPC mettra en œuvre les recommandations de la réunion tripartite tenue à Sofia, et que le personnel du Ministère de l'agriculture (MARA) se réunirait les 25 et 26 janvier pour établir le plan de gestion d'urgence de la PPR en Thrace. Il mentionna dans son rapport un engagement à soutenir le développement collaboratif des actions de surveillance en Anatolie orientale.

Au cours de la discussion, le Secrétaire remercia le représentant de la Turquie pour la lettre indiquant le soutien complet pour la mise en oeuvre des recommandations de la réunion de Sofia. Il suggéra que le document produit soit encore révisé afin de clarifier de possibles inexactitudes et il indiqua qu'il contacterait le Dr Tufan sur des points spécifiques.

Il a été accepté aussi qu'en plus des cartes de distribution de la fièvre aphteuse, seraient fournies dans les rapports futurs des cartes similaires de la distribution de la PPR, de la BT et des varioles ovine et caprine.

Rapport sur la vaccination et la surveillance de la fièvre aphteuse dans le sud du Caucase

Le Dr Carsten Pötzsch présenta un rapport de sa première mission dans le sud du Caucase réalisée en octobre-novembre 2004 **(Annexe 5)**.

Il présenta les résultats de ses recherches sur l'utilisation du vaccin fourni aux pays par la FAO avec les fonds de la CE. La fourniture de vaccins a été suffisante pour que 93 à 100% des grands ruminants dans la zone de vaccination reçoivent une dose par bovin. Des trous potentiels dans la couverture vaccinale furent identifiés et des mesures prises pour réduire le problème, comprenant l'utilisation de vaccins gardés en réserve pour le compte de la FAO au FGI-ARRIAH. Cependant, de nombreux problèmes importants furent relevés, qui devraient être traités par les pays et qui pourraient nécessiter un ensemble de mesures de soutien à plus long terme.

Il exposa ses remarques sur le système de déclaration, sur les incertitudes dans l'évaluation du risque de fièvre aphteuse et sur le développement des plans de séro-surveillance pour déceler l'éventuelle circulation du virus dans les zones à risque. Le développement et la mise en œuvre de la séro-surveillance au niveau national devrait être fortement encouragés, et une façon d'y parvenir serait « d'institutionnaliser la surveillance » par le biais du soutien à chaque pays devant entreprendre l'action grâce au soutien extérieur, lequel serait poursuivi pendant un temps suffisant pour permettre d'en établir le bénéfice et pour mettre en place le programme le plus économiquement efficace.

Le Comité Exécutif donna son appréciation sur le travail fourni par le Dr Pötzsch et approuva le plan d'ensemble de sa seconde mission au printemps 2005.

Conclusions

- Le rapport de la première mission fournirait une base solide pour le développement d'un projet à long terme ainsi que recommandé par la 70ème session de l'EUFMD et par la réunion de l'OIE en mai 2004.
- Le rapport de vastes migrations internes d'animaux suggère qu'un changement significatif des pratiques d'élevage s'est produit dans les cinq dernières années, ce qui a de sérieuses conséquences sur la planification des programmes de contrôle. L'impact de ces mouvements devrait être examiné plus avant pour assurer le succès de la vaccination de zones tampon.
- Un plan d'assurance qualité externe est requis afin de s'assurer de la qualité technique des laboratoires nationaux engagés dans la séro-surveillance.

Recommandations

- Les objectifs à long terme, incluant la régionalisation de l'infection, devraient être identifiés et convenus avec chaque pays.
- La fourniture continue d'un coordinateur technique pour la surveillance et le contrôle par la Commission EUFMD devrait comprendre l'identification des besoins pour soutenir le statut d'état indemne de fièvre aphteuse.
- Des enquêtes supplémentaires sur la commercialisation du bétail et sur les mouvements d'animaux dans les régions frontalières devraient être fortement encouragées.
- Les autorités arméniennes devraient fournir une explication sur la raison pour laquelle seulement 30 000 des 50 000 doses de vaccins fournies par la FAO/CE ont été délivrées pour la zone du Nagorny-Karabath.
- L'atelier FAO de Tbilissi en décembre avait été un moment déterminant dans le développement de la coopération régionale entre les services vétérinaires; l'élan obtenu dans la dernière période de 2004 devrait être maintenu.

- Il existe une insécurité considérable dans la situation politique et dans la situation de la santé animale dans la région ; les actions de l'EUFMD/OIE/CE visant à stabiliser la situation de la fièvre aphteuse devraient être vigoureusement soutenues.
- Une réunion du Comité de direction du Cadre global de lutte contre les maladies animales transfrontalières [GF-TADs] s'occupant du contrôle de la fièvre aphteuse dans le Caucase devrait être organisée entre les sessions générales de l'EUFMD et de l'OIE (au début de mai 2005).
- L'EUFMD devrait poursuivre, en collaboration avec les organisations partenaires, la formulation d'un projet de 3 ans pour la surveillance et le contrôle de la fièvre aphteuse dans le Caucase, et cela avant la réunion de Comité de direction; une étude de faisabilité devrait suivre peu après, de façon à mener le projet à bonne fin avec le soutien des gouvernements hôtes et à guider les actions en fin d'année 2005, en préparation d'un début du projet en janvier 2006 si possible.

Rapport sur l'action de l'EUFMD en Anatolie orientale pour soutenir l'élaboration des lignes directrices pour les enquêtes sur la fièvre aphteuse

L'action avait pris place en septembre 2004 grâce au financement de la Commission EUFMD, comme convenu lors de la 70ème session. Ce fut une expérience très riche d'enseignement pour tous ceux qui furent concernés ; elle mit en lumière des aspects de l'épidémiologie et du contrôle de la fièvre aphteuse en Turquie orientale qui devraient être suivis par la DGPC.

Suite à la discussion, il a été accepté que:
- L'exercice a fourni un aperçu très significatif de l'épidémiologie de la fièvre aphteuse dans la zone d'Erzurum, et par extension, dans d'autres parties utilisant des pratiques d'élevage similaires.
- L'exercice a indiqué la complexité de la fièvre aphteuse dans les régions où plusieurs sérotypes sont en circulation.
- Les procédures d'enquête sur la fièvre aphteuse nécessitent plus de développement et de mise à l'épreuve avant d'être prises en considération pour une application générale aux enquêtes sur la maladie.
- Les vétérinaires officiels des pays libres de fièvre aphteuse devraient être encouragés à acquérir de l'expérience dans les enquêtes sur les foyers de FA dans les conditions du terrain; la Commission EUFMD devrait identifier des options afin d'assister les Services vétérinaires de l'Etat dans l'acquisition de l'expérience de terrain de la FA.
- Les recommandations de la mission devraient être prises en considération plus avant, car elles sont hautement pertinentes pour le développement, le suivi et la mise en oeuvre d'un contrôle efficace de la fièvre aphteuse en Anatolie.

Le projet de surveillance en Iran

Le Secrétaire rapporta que le gouvernement français avait pris des dispositions pour le détachement d'un vétérinaire inspecteur, le Dr Francis Geiger, pour travailler sous la supervision de la FAO en Iran pour une période de 3 ans à partir de janvier 2005. Le Dr Geiger serait soutenu financièrement par la France, dans l'espoir que les ressources financières pour les activités de surveillance viendraient à travers la Commission EUFMD, sous l'enveloppe de financement demandée à la DG-SANCO par cette Commission en 2003.

L'engagement du fonctionnaire pour le projet avait été pris suite à des signaux positifs reçus de la DG-SANCO en septembre 2004. Cependant, du fait qu'aucune lettre indiquant l'accord de financement n'a été reçue de la DG-SANCO avant la fin de 2004, il serait maintenant nécessaire de renouveler ou de prolonger l'Accord d'exécution entre l'EUFMD/FAO et la CE relatif aux activités de l'EUFMD pour la période 2005-2008, afin de permettre d'opérer le financement sous cette nouvelle base légale.

Le Dr Füssel indiqua qu'il était certain que les procédures internes requises pour l'approbation de l'Accord d'exécution avec la FAO, y compris le financement de mesures dans des pays tiers destinées à la sauvegarde des pays européens, pourraient être résolues du fait qu'il existait un accord général sur l'importance des actions et des processus pour traiter les menaces de fièvre aphteuse à travers l'accord avec la FAO. Au cours de la discussion, il a été convenu que des délais supplémentaires dans la mise en œuvre du projet iranien étaient inacceptables, et qu'il était urgent de conclure les négociations du nouvel Accord, au travers duquel les actions sont soutenues.

Il a été recommandé que le dossier soit porté au plus haut niveau de la DG-AGRI par la Présidente et le Dr Willeberg a accepté de faire cela au nom du Comité Exécutif.

Rapport de la session du Groupe de recherche tenue en Crête

Le Dr Kris De Clercq présenta un résumé des progrès (**Annexe 6**) du Groupe pour atteindre les objectifs convenus entre celui-ci et le Comité Exécutif en décembre 2003.
Il présenta ensuite un rapport des sessions fermée et ouverte du Comité technique permanent tenues à Chania, en Crête, en octobre 2004. Les conclusions et recommandations principales sont données en **Annexe 7 et la liste d'actions en Annexe 8.** Au nom du Comité, il remercia le Dr Stylas et les Services vétérinaires de Grèce pour avoir accueilli la session, qui fut renommée pour son ambiance et son hospitalité excellentes. La session avait un programme très chargé, s'étendant depuis tôt le matin jusqu'à tard dans la nuit sur 5 jours, et couvrant 10 points de discussion majeurs

Le premier jour de discussion fut réservé aux membres élus et aux observateurs invités.

Le Dr De Clercq demanda au Comité Exécutif de noter:

- **L'adoption d'un papier sur les normes de biosécurité pour les laboratories réalisant la sérologie de l'infection par le virus de la fièvre aphteuse**, qui devrait grandement aider les pays qui développent des structures décentralisées à atteindre une haute capacité de traitement en sérologie pour la surveillance post foyers.
- Le document de base du Groupe au sujet d'une banque européenne de réactifs de diagnostic, laquelle est considérée comme nécessaire pour sauvegarder la possibilité de réaliser un grand rendement en matière de séro-surveillance.
- **Les progrès des groupes de travail relatifs aux problèmes de mise en œuvre des stratégies DIVA**. Cela inclut l'évaluation comparative des tests NSP, et le groupe de travail sur la surveillance post-vaccination. Le premier terminera son travail en avril, à temps pour la Session générale de l'EUFMD. Le dernier groupe, à la suite des discussions lors de la session de Chania, élabora un document de position pour le Comité technique, transmis à l'OIE par le Secrétaire de l'EUFMD en décembre 2004 (**Annexe 9**) intitulé: "*Considérations du Comité technique permanent de la Commission EUFMD*". L'emploi du temps des sessions de l'Exécutif n'a pas permis que ce document de position soit revu par le Comité Exécutif au complet, mais une soumission rapide fut faite en raison de l'urgence à le soumettre avant les réunions des Commissions de l'OIE en janvier 2005
- Que la mission au Zimbabwe mission avait fourni **des assurances quant à l'utilisation des tests NSP** pour la détection des animaux exposés aux virus SAT, avec des estimations de la NSPE pour la détection des porteurs chroniques (75-90%) qui étaient très similaires à celles obtenues avec des sérums expérimentaux lors de l'atelier sur les NSPE à Brescia en mai 2004.
- Que le Groupe avait élaboré un brouillon de lignes directrices pour **le suivi de la performance des vaccins contre la fièvre aphteuse et de la vaccination sur le terrain, ainsi qu'il avait été demandé par la 69ème session.**

Le rapport de la session couvrait près de 500 pages, et était maintenant disponible sur le site web. La session avait été suivie par un nombre record d'observateurs du monde entier et pourrait être considérée comme un évènement de portée globale.

Le Dr De Clercq demanda au Comité Exécutif de noter les recommandations de la session ouverte ; une réponse était attendue à un certain nombre d'entre elles.
Le point concernant la mise en conformité avec les exigences en matière de séro-surveillance contenues dans la Directive de la CE était spécialement important.
Le Comité Exécutif devrait être averti que:

- Il reste des doutes sur: (i) le niveau de certitude avec lequel l'état indemne de l'infection doit être démontré; (ii) la manière d'interpréter les résultats de tests basés sur des troupeaux quand ceux-ci ne comprennent qu'un petit nombre d'animaux et (iii) les détails sur la façon de résoudre les problèmes de spécificité des tests en répétant ces tests et les prises d'échantillons.
- Il est recommandé à chaque pays d'inclure dans ses Plans d'urgence pour les laboratories des arbres de décision pour indiquer les tests de suivi à réaliser et chacun devrait faire des estimations quantitatives sur les tests de suivi.

Le Comité Exécutif devrait être informé que le financement de l'EUFMD avait soutenu le LMR pour mettre en oeuvre l'exercice de normalisation de la FAO, lequel avait fourni à nouveau un service et de l'information très utiles.

- Au total, un haut niveau de cohérence dans les résultats entre les laboratoires, à la fois pour les sérums de référence et les mélanges servant à tester les capacités, dans l'utilisation les deux tests NSP et SP.
- Une vérification annuelle des capacités inter laboratoires est essentielle pour accréditer la qualité; elle devrait être l'activité centrale des futures phases.
- Un meilleur mélange de sérums destiné à éprouver le test NSPE est nécessaire.

Le dernier point de la session ouverte concerna le maintien et le développement de l'expertise européenne relative au contrôle de la fièvre aphteuse; il fut recommandé que le rôle du Groupe de recherche de l'EUFMD soit à nouveau examiné et développé afin d'aider à satisfaire les besoins des pays membres européens dans un large domaine de compétences de leurs groupes nationaux d'experts de la fièvre aphteuse.

Le Prof. Willeberg expliqua comment lui avait été confié le rôle de liaison avec le Groupe de recherche (GR) et considéra que la session avait été un évènement très important ; c'est probablement la consultation globale la plus significative en matière de progrès des recherches sur la fièvre aphteuse, qu'il conviendrait de répéter régulièrement. Il félicita le GR pour le travail assidu réalisé pour la préparation de la session et pendant de longues journées. Il présenta le résumé d'une consultation avec des participants représentant les CVO de plusieurs pays européens. Ces résultats avaient été présentés comme un retour sur la session, et il exposa plusieurs points qu'il faudrait traiter dans la sélection des futurs membres, dans l'organisation des prochaines sessions et dans le choix des priorités d'action.

La Présidence remercia le Groupe pour l'excellence de leur rapport. Le rapport de la session du Comité technique permanent fut approuvé par le Comité Exécutif.

Celui-ci recommanda que le Secrétaire et le Président prennent en considération la réaction du groupe des CVO en prenant les dispositions pour la prochaine session.

Situation du risque – Rapport du LMR

Le Dr David Paton présenta le rapport du LMR pour la période suivant la 70ème session (**Annexe 10**). La fièvre aphteuse a été déclarée par 48 pays en 2004.

Il n'y eut pas de déclaration de foyers de fièvre aphteuse dans les pays officiellement libres de FA ne pratiquant pas la vaccination, et la restauration de statut dans certaines parties de l'Amérique du sud. La Commission scientifique de l'OIE pour les maladies animales avait décidé en janvier 2005 de restaurer le statut de zone indemne de FA avec vaccination pour la zone de l'**Argentine** située au nord du 42ème parallèle, avec effet au 19 janvier 2005, et de restaurer le statut de pays indemne de FA avec vaccination au **Paraguay** avec effet à la même date.

Cependant, des foyers de fièvre aphteuse ont été déclarés par l'Afrique du sud dans la zone de surveillance autour de la zone indemne (zone exportatrice), ainsi que dans certaines parties du monde où la circulation du virus n'avait pas été rapportée récemment, en Russie, en Mongolie, au Brésil, au Pérou et en Colombie.

Des isolements provenant de 23 pays furent reçus par le LMR en 2004, dont 21 en provenance d'Asie (4 pays du Moyen Orient, 2 en Asie du sud et 4 en Asie du sud est) et d'Afrique (11 pays sub-Sahariens), et 2 d'Europe (d'un pays, avec virus SVD confirmé). Le nombre des pays est au dessous de la moyenne des 30 dernières années, et on considère que cela est le reflet de l'augmentation de la difficulté à soumettre des prélèvements principalement à cause des problèmes de transport. Comme d'habitude, aucun isolement ou prélèvement n'a été reçu d'Amérique du sud. La collaboration accrue avec le Botswana Vaccine Institute a largement aidé à la caractérisation des isolements originaires de l'Afrique australe, tandis que le nombre très limité de soumissions provenant du Moyen Orient est problématique.

Le taux de caractérisation a augmenté, avec 182 isolements séquencés (VP1), 54 caractérisés antigéniquement par ELISA et 57 caractérisés antigéniquement par neutralisation du virus. Le typage des isolements de virus par le LMR est partiellement soutenu par contrat signé avec la Commission EUFMD. Un résumé des résultats fut fourni, sous la forme d'un papier préparé pour la réunion de la Commission scientifique de l'OIE pour les maladies des animaux de début janvier 2005.

Il est important de noter que:

- Le type Asia-1 avait été déclaré en Iran, ce qui constitue un risque pour la santé animale en Turquie et en Europe;
- Le type C a "ré-emergé", avec des rapports officiels venant du Brésil et du Kenya, et des foyers suspects au Pakistan et en Ethiopie[1];
- Il y a eu un mouvement vers l'est du type A à l'intérieur du Vietnam, déclaré pour la première fois.

Pour ce qui concerne les banques européennes d'antigènes et de vaccins, les recommandations contenues dans le Rapport de la session du Groupe de recherche de l'EUFMD[2] en 2003 restent inchangées.

La variabilité des types A et SAT est très préoccupante, et doit être constamment suivie. Une enquête détaillée est justifiée pour mieux comprendre les circonstances par lesquelles le variant du type A émerge en Iran et dans d'autres pays du Moyen Orient.

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[1] Des efforts ont été faits par le LMR et la Commission EUFMD pour obtenir des prélèvements pour typage au LMR. Le soutien de la FAO (à travers l'EUFMD) pour couvrir les frais de transport a été rendu disponible pour les envois venant du Kenya. Plus d'information sur le virus de type C isolé à partir des foyers au Brésil a été publiée par l'OPS lors de la session du Groupe de recherche de l'EUFMD en Crête.

2 Rapport de la session du Groupe de recherche du Comité technique permanent de la Commission EUFMD tenue à Gerzensee, Berne, 16 au 19 septembre 2003. FAO, PP 9-10.

Le Dr Paton porta à l'attention les contraintes liées à la soumission de prélèvements lesquelles augmentent d'année en année, s'ajoutant aux problèmes affectant les échanges de virus, qui comprennent les questions relatives à la propriété intellectuelle. Il souleva la question de la fonction du LMR qui est également affectée par l'absence d'isolements en provenance des Laboratoires régionaux de référence. Ce problème est d'une importance majeure et le Dr Paton fut heureux d'annoncer que le LMR, l'OIE et le Secrétariat de la FAO/EUFMD travaillaient ensemble pour trouver des solutions.

Un mécanisme est celui de l'action de coordination sur la fièvre aphteuse et la peste porcine classique qui fut lancée en janvier 2005, dans laquelle l'OIE et la FAO/EUFMD sont partenaires dans le Comité de direction. Cela devrait compléter le travail du groupe ad hoc de l'OIE sur les banques d'antigènes et de vaccins, où le Secrétaire de l'EUFMD avait exercé la fonction de rapporteur et auquel le Dr De Clercq et lui-même avaient participé. Il résuma les Termes de référence du groupe ad hoc, lesquels nécessitent d'aboutir à un accord sur l'information que doivent partager les Laboratoires régionaux de référence.

Discussion

La question du niveau de protection de O_1 Manisa contre les types de virus O prévalant en Amérique du sud fut soulevée. Le Dr Paton indiqua que les résultats disponibles suggéraient qu'il serait prudent d'avoir un accès adéquat à des stocks de O_1BFS .

Le Dr Domenech indiqua en quoi les projets de la FAO soutiennent la surveillance de la fièvre aphteuse. La Commission peut prendre note des projets de la FAO dans 5 pays d'Asie centrale qui commencèrent en 2004, et en Afrique de l'ouest (projet régional de coopération technique). Les fonctionnaires techniques responsables sont basés à Rome et travaillent étroitement avec le Secrétariat de l'EUFMD.

Le Dr Bálint considéra que les besoins nationaux et internationaux en matière d'échange d'information pour l'estimation du risque de fièvre aphteuse devraient avoir plus d'importance que les considérations de propriété intellectuelle des individus. Ce point devrait être abordé par les organisations internationales quand elles élaborent des normes pour les échanges d'information.

Le Secrétaire appela l'attention sur la recommandation de la session du Groupe de recherche selon laquelle la fonction globale du LMR devrait être discutée lors de la Session générale de l'EUFMD. Suite à cela, le Dr Paton demanda le point de vue de l'OIE sur la question des Laboratoires mondiaux de référence.

En réponse, le Dr Schudel mentionna la difficulté que poserait la désignation d'un LMR par l'OIE, requérant l'accord des 167 pays membres. L'OIE a reconnu que la couverture de l'information sur la surveillance de la fièvre aphteuse au niveau global est insuffisante; les modalités pour améliorer cet état de choses étaient en cours d'étude, y compris de procéder à un jumelage pour soutenir le développement du Laboratoire de PakChong en Thaïlande. Le besoin d'un Laboratoire régional de référence pour l'est de l'Asie est reconnu et, dans ce contexte, il mentionna la possibilité que le Laboratoire de LanZhou en RP de Chine pourrait aussi devenir une installation régionale dans le futur

Le Dr Füssel supporta avec force l'argument qu'il sera nécessaire pour le LMR, dans le futur prévisible, d'avoir accès aux isolements de virus provenant des zones à risque, afin d'assurer à temps la réalisation des essais et des appariements antigéniques et d'informer les gestionnaires des banques d'antigènes maintenues en Europe.

Le Dr Domenech soutint ce raisonnement, et donna le point de vue de la FAO selon lequel il existe un évident besoin d'un LMR spécifique, non pas seulement pour les besoins d'aujourd'hui mais aussi pour sauvegarder les matériaux de référence pour le développement à venir de tous les tests et pour les analyses.

Le Dr Schudel suggéra que le réseau de l'Influenza aviaire soit considéré comme un modèle potentiel pour la coordination entre les laboratoires de référence. Un laboratoire pourrait fournir le Secrétariat, lequel pourrait élaborer un système modèle à étudier pour la fièvre aphteuse. L'OIE travaille au développement des compétences des laboratoires régionaux; il considéra que ce n'était pas encore le moment de sélectionner un laboratoire comme étant prééminent.

Le Dr Schwabenbauer résuma les arguments; il était évident que chaque région doit trouver les vaccins appropriés pour elle-même et par ses propres moyens; cependant, d'excellents laboratoires à l'intérieur d'une région peuvent ne pas délivrer l'information globale requise pour satisfaire nos besoins. Il faut avoir confiance dans la qualité de l'information et son opportunité. Elle suggéra d'explorer plus avant le modèle de l'influenza aviaire pour servir de modèle possible pour la fièvre aphteuse.

La suggestion fut acceptée par le Comité Exécutif et soutenue par le Dr Paton. Le Dr de Leeuw avisa qu'il est scientifiquement bon de comparer les résultats; l'échange de matériel et des résultats des tests devrait être assuré, quelque soit le système proposé. Il se dit préoccupé par la compétition pour le financement entre les laboratoires régionaux, laquelle devrait être évitée.

Le Dr Domenech indiqua que la FAO a soutenu le développement de réseaux de laboratoires, certains ayant des fonctions de coordination et d'harmonisation. La tendance vers la reconnaissance conjointe de laboratoires par la FAO et l'OIE devrait probablement continuer.

Le Dr Füssel indiqua que la CE pourrait jouer un rôle dans l'amélioration de la soumission de prélèvements. Des arguments commerciaux pourraient aider à leur soumission par les régions d'où l'exportation vers la CE est autorisée. Il indiqua que la DG-SANCO soutenait vigoureusement les efforts pour s'assurer que la contre-vérification de l'appariement antigénique et les tests de caractérisation soient réalisés en Europe, car l'information était cruciale pour la gestion du risque.

Le Comité Exécutif exprima son accord pour que le Secrétaire continue à travailler étroitement avec le LMR et l'OIE sur les questions ci-dessus, et que le soutien apporté par la Commission au LMR pour la caractérisation des virus et d'autres fonctions de service devrait être revu. Les Membres encouragèrent l'identification et l'évaluation du coût des propositions spécifiques pour traiter des contraintes.

Point 3. Document de stratégie – l'EUFMD pour les quatre prochaines années

Le Secrétaire présenta le document sur un projet de Plan stratégique pour la Commission pour la période 2005-8 **(Annexe 11).** Ce plan avait été élaboré après la 70ème session, et révisé pour tenir compte de la discussion du premier brouillon avec des Membres du Comité Exécutif lors d'une réunion organisée pendant la Conférence d'Avila en septembre 2004. Le Plan propose une vision pour les activités de la Commission qui met en relief la continuité de l'état indemne des pays d'Europe, la progressive réduction de l'incidence, de la distribution et du risque de fièvre aphteuse en Turquie, la réduction du risque pour l'Europe à travers des activités dans les zones périphériques et une expertise européenne relancée dans chaque pays membre. En présentant la stratégie, le Secrétaire reconnut que les actions de la Commission ne peuvent réussir que dans un environnement favorable de mesures nationales et internationales travaillant pour des objectifs similaires. La stratégie de la Commission serait de se concentrer sur quatre points clé, 1) de projets de contrôle de la fièvre aphteuse, 2) d'activités d'"observatoire"de la fièvre aphteuse aidant à l'évaluation du risque, y compris le soutien au typage des virus pour

informer la direction des banques de vaccins, 3) sur la coordination des études techniques requises pour traiter des contraintes , et 4) sur la construction de capacités pour augmenter l'expertise à travers l'Europe. Au cours du développement de la stratégie, les besoins des pays bénéficiaires à travers toute l'Europe doivent être reconnus par la mise en œuvre d'actions équilibrées. La surveillance du risque et l'augmentation de l'expertise devraient bénéficier aux pays membres qui sont les plus éloignés du sud est de l'Europe.

Le Plan prévoyait que la stratégie se traduirait par des activités sous chacun des thèmes ci-dessus. Un cinquième thème pourrait être la diffusion de l'information; bien que cela puisse être considéré comme étant partie intégrale de chacun des quatre thèmes, il serait peut être avantageux de disposer d'apports spécifiques pour garantir des activités et des résultats au travers des quatre thèmes principaux.

Le Secrétaire suggéra que des objectifs de campagnes devaient être établis pour le contrôle de la fièvre aphteuse en Europe, en comparaison desquels les progrès pourraient être mesurés. Les objectifs de campagne proposés ne pourraient pas être garantis par les activités du projet; au contraire, ils devraient être considérés comme des objectifs de plus haut niveau auxquels les actions contribueraient, en assumant que des actions de soutien concertées prennent place dans la région épidémiologique. Le rôle de la Commission serait de proposer, de mettre en oeuvre ou de soutenir des activités qui conduisent à des résultats définis; le rôle de direction serait de suivre le processus afin de s'assurer que les résultats étaient obtenus, prenant en considération leur pertinence en relation avec ceux d'autres projets au niveau national ou international. Il suggéra que des objectifs (cibles) plus élevés soient identifiés pour les autres thèmes, et, par la suite, des activités et des résultats soient décrits dans des documents de projet spécifiques.

La stratégie financière fut ébauchée. Il serait nécessaire de corriger la base du financement par l'inversion de l'effet de la dépréciation du dollar, et de conclure la renégociation avec la CE afin d'obtenir la base nécessaire pour soutenir et continuer les actions approuvées conjointement jusqu'en 2008. De plus, le soutien d'au moins un poste d'expert associé était vital, et il serait nécessaire d'utiliser plus le personnel maison et extérieur pour réaliser les projets identifiés. D'ailleurs, une plus large base de financement des activités pourrait être obtenue.
Le Comité Exécutif discuta les éléments du Plan et fit des suggestions pour son amélioration. Il fut recommandé que:

- Il faudrait renforcer la documentation de soutien, avec des références spécifiques
    - ° au contexte politique des pays ne faisant pas partie de l'UE et aux changements attendus au cours de la période
    - o aux problèmes techniques et autres qu'il faudra traiter,
    - o à la question de la construction des capacités requises dans les pays européens qui ne sont pas membres de l'UE, ou qui bordent l'UE et/ou sont des membres de l'EUFMD ;
- Des documents de projet spécifiques devraient être élaborés, pour chacun des thèmes.
- Des Plans devraient être développés plus avant, au moins jusqu'au stade de Notes de concept, pour la 36ème Session générale.

Point 4. Le financement CE – révision de l'Accord CE/EUFMD

Le Secrétaire expliqua au Comité comment la renégociation de l'Accord d'exécution entre la CE et la FAO sur les actions permanentes à entreprendre par la Commission EUFMD, a utilisé "l'Accord cadre" entre les Agences des Nations Unies et la Commission Européenne élaboré en 2003. Il rappela au Comité Exécutif la structure souple de l'Accord en place entre 2001 et 2004, qui autorisa la mise en oeuvre d'actions rapides après que les décisions sur la façon d'agir aient été acceptées entre la Commission et la DG-SANCO. De plus, la convention pouvait être révisée avec l'accord des deux parties, ainsi qu'il advint en 2003 pour inclure des actions pour soutenir le contrôle de la fièvre aphteuse dans le Caucase. La nécessité d'obtenir l'accord du donateur au cas par cas pour les dépenses est une particularité peu ordinaire, qui a conduit à

certains problèmes dans l'exécution des recommandations du Comité Exécutif. Dans le but de réduire les délais d'exécution, une période de 30 jours pour la réponse de la DG-SANCO fut spécifiée dans le premier Accord. Le Secrétaire fournit deux brouillons d'éléments de l'Accord d'exécution (le document de l'Accord Commission Européenne-Nations Unies et l'Annexe 1, Description de l'action).

Dans le premier document, les Conditions Spéciales pour l'Accord étaient proposées, indiquant que le projet serait mis en oeuvre par la FAO en accord avec les services responsables de la CE. Pour cela l'EUFMD-FAO devra s'assurer que chaque dépense et engagement avec une tierce partie relative à ce projet est approuvé par la Commission (Européenne) en accord avec la procédure fournie. Les rapports des sessions de l'EUFMD et de son Comité Exécutif seront considérés comme des rapports techniques officiels du projet.

La description des activités du projet fit suite à celle du Plan stratégique de l'EUFMD, tel que discuté à Avila et approuvé par la suite sous le point 3. Les activités principales du projet furent identifiées sous quatre têtes de chapitre:

Catégorie 1: Actions d'urgence

Catégorie 2: Activités de routine réalisées pour aider à l'évaluation du risque d'entrée de la fièvre aphteuse et à l'évaluation de la convenance de la banque de vaccins européenne

Catégorie 3: Coordination des activités techniques et des études sur le contrôle de la fièvre aphteuse au niveau régional et traitement des contraintes à la mise en œuvre des politiques

Catégorie 4: Construction des capacités pour la prévention et le contrôle

Catégorie 5: Activités, non listées ci-dessus, à mettre en oeuvre sous le Projet, soumises à l'accord préalable du Comité Exécutif de l'EUFMD et de l'Autorité Contractante. Pour les années 2005-2008 les mesures spéciales à prendre sont les suivantes:

5.1. Un programme pour le contrôle de la fièvre aphteuse en Thrace turque, comprenant mais pas limité à la fourniture de vaccins, à la vaccination dans certaines provinces de Thrace, l'organisation et la réalisation d'enquêtes épidémiologiques, d'études de laboratoire, qui peuvent s'étendre à l'Anatolie, en soutien aux objectifs de surveillance. Dans des circonstances exceptionnelles, ce programme de contrôle peut être élargi à des menaces de maladies infectieuses majeures où la situation pourrait le nécessiter.

5.2. Surveillance clinique, sérologique et vectorielle continue dans les régions de Thrace en Bulgarie et en Grèce pour la fièvre aphteuse, la variole du mouton, la fièvre catarrhale ovine, et la peste des petits ruminants.

5.3. Un programme pour le contrôle de la fièvre aphteuse en Arménie, Azerbaïdjan et Georgie, comprenant la fourniture de vaccins, la vaccination dans certaines parties de leurs territoires, l'organisation et la réalisation d'enquêtes épidémiologiques, d'études de laboratoire et de la construction de capacités en soutien aux objectifs de surveillance.

5.5. Un programme pour la protection des frontières de la Turquie contre l'introduction de fièvre aphteuse exotique à partir des pays voisins, y compris des actions pour améliorer la surveillance de la circulation des souches de virus aphteux exotiques en République d'Iran.

Le Dr Füssel indiqua que c'était la DG-SANCO qui avait proposé que les activités du projet relatives au contrôle de la fièvre aphteuse dans la région d'Anatolie de Turquie soient traitées en tant qu'élément séparé et placées sous la section 5.1, relative à la surveillance de la FA dans la région de Thrace. Cette modification fut faite pour éviter le recouvrement potentiel avec des

activités financées par d'autres Directions générales de la CE relatives au contrôle des maladies animales en Anatolie. Cependant, considérant que ces dernières pourraient ne pas être mises en oeuvre avant 2006 ou plus tard, l'Accord d'exécution apparut comme étant un mécanisme approprié pour assurer que les actions contre la fièvre aphteuse pourraient être poursuivies en fonction de la situation du risque.

Le Comité Exécutif recommanda:

- Que la FAO et la DG-SANCO aillent de l'avant, avec une certaine urgence, afin de conclure l'accord basé sur les documents présentés.
- Que la Présidente recherche l'assurance auprès du Commissaire à l'agriculture que l'accord sera rapidement conclu de façon à permettre que les actions soient mises en œuvre sans délai supplémentaire.

Point 5. Programme de travail pour le biennium 2005-2006

Le Secrétaire indiqua le programme de travail pour 2005 et fournit des indications sur le calendrier probable des évènements en 2006. Ces activités furent regroupées en :

- Sessions du Comité Exécutif, Session générale et Groupe de recherche (6 réunions dans la période).
- Projets de surveillance et de contrôle de la fièvre aphteuse, avec des dates de début estimées présumant que l'Accord d'exécution CE-FAO est rapidement conclu.
- Projets de surveillance et de contrôle de la fièvre aphteuse exécutés sous financement du Programme de Coopération Technique de la FAO, incluant le projet régional dans la région de Thrace sur la surveillance active de la FA, de la PPR, de la fièvre catarrhale du mouton et des varioles ovine et caprine, et le projet régional dans le Caucase.
- Activités visant à améliorer la soumission de prélèvements originaires de la Corne de l'Afrique (Soudan, Kenya).
- Activités financées par une Lettre d'accord, comprenant la collecte de sérums de porcs vaccinés ou exposés à Hong Kong.
- Activités de soutien au développement des normes internationales (groupes ad hoc de l'OIE), et analyse du risque de FA pour l'Europe (groupe de travail de l'EFSA).
- Rassemblement de l'information et rapport.

Il espéra que d'autres activités pourraient être mises en oeuvre dans la période suite à un accord sur des actions spécifiques sous le nouvel Accord d'exécution.
L'Action de Coordination, financée par la DG-Recherche, pourrait aussi être réalisée pendant cette période, suite au début de ce projet le 1er janvier.

Le Comité Exécutif approuva le calendrier proposé pour les activités du Secrétariat.

Point 6. Etat financier pour 2004 et Budget de la Commission pour le biennium 2006-2007

Le Secrétaire présenta le rapport financier pour les trois fonds fiduciaires opérés par la Commission (**Annexe 12**). En ce qui concerne le MTF/INT/011/MUL, il appela l'attention sur le solde de 178,384 US$ au 31/12/04. Les dépenses avaient été réalisées en conformité avec le budget, avec toutefois un dépassement minimal au dessus des contributions annuelles convenues en 2003, malgré une dépréciation significative du dollar. L'augmentation du solde pendant les 12 mois correspond au paiement de plusieurs années d'arriérés par un pays. Cependant, la base des coûts avait augmenté dramatiquement en raison de la dépréciation du dollar, et les contrats proposés pour la surveillance et d'autres activités, y compris les ateliers, durent être diminués en 2004 ou financés par d'autres sources. Ceci eut pour effet de réduire la capacité de la Commission à agir indépendamment d'autres sources, quand cela fut décidé par la situation et approuvé par le Comité Exécutif.

Pour ce qui concerne le budget du fonds fiduciaire soutenu par la CE (DG-SANCO), MTF/INT/003/EEC, un déficit de 4,168 US$ a été enregistré dans l'état financier. Le Secrétaire mentionna qu'en fait il existait un solde légèrement positif d'environ 5,000 US$, et que la position exacte serait corrigée dans la révision budgétaire de janvier 2005. L'utilisation du solde positif serait discutée avec la Présidente et la DG-SANCO. L'anomalie dans les comptes intervint parce que des fonds avaient été engagés pour l'achat de certains articles, mais les achats n'avaient pas été effectués car la priorité avait été donnée à d'autres articles, en particulier l'achat de vaccins pour le Caucase.

Au sujet du budget de la Commission pour le prochain biennium, le Secrétaire appela l'attention sur la nécessité d'établir un budget qui serait présenté aux membres de la Commission pour ratification lors de la 36ème session.

Dans le document présenté **(Annexe 13)**, l'attention avait été attirée sur l'impact de la chute de 26% de la valeur des contributions faites par les membres pendant la période de 2 ans depuis que le budget pour 2004 et 2005 avait été préparé, du fait de la dépréciation du dollar. Si l'effet de la dépréciation n'est pas corrigé, une perte d'environ 100 000 US$ pourrait être prévue pour 2006 et 2007. L'impact de la capacité du Comité Exécutif d'engager des fonds pour financer des activités a été souligné.

Un budget pour 2006-7 fut proposé, dans lequel la dépréciation avait été traitée et un taux d'inflation de 0% (croissance zéro) ou de 4% appliqué aux lignes budgétaires où une augmentation des coûts est attendue. Le taux de 4% d'inflation avait été stipulé par la Division de la planification et du budget de la FAO, et est utilisé dans la maison pour la planification.

Dans le schéma de croissance zéro, avec un budget à la dépréciation ajustée, la contribution des pays en euro serait équivalente pour 2006-7 à celle de 2004-5. Dans le schéma de 4% de croissance, avec un modèle à dépréciation ajustée, l'augmentation requise, exprimée en euro, est équivalente à 1,45% par an. Selon la Constitution, le budget devrait être exprimé en dollars US ; les contributions des pays ont donc été calculées en US$ et montrées dans le document.

Le sujet fut ouvert à la discussion. L'utilisation du chiffre de 4% pour la croissance des coûts fut contestée, et un membre suggéra qu'un chiffre de croissance des coûts plus bas soit appliqué. Cette proposition de changement n'ayant pas été clairement soutenue par d'autres membres du Comité, il fut accepté d'utiliser ce chiffre dans la planification budgétaire.

En conclusion, le Comité:

- Approuva les états financiers pour l'année se terminant le 31 décembre 2004;
- Accepta que l'effet de la dépréciation du dollar contre l'euro devrait être corrigé dans le budget proposé pour 2006-7;
- Accepta que le budget annuel pour le fonds MTF/INT/011/MUL soit proposé à 496,210 US$ pour le biennium 2006-7;
- Accepta le principe que la FAO, au nom de la Commission devrait faire la démarche d'abolir les arriérés de l'Ex République Fédérale Socialiste de Yougoslavie.

Point 7. Election du Groupe de recherche du Comité technique permanent

Ce point avait été reporté de la 70ème session. L'importance d'une composition équilibrée du Comité avait été reconnue lors de cette session, et l'élection à venir fournit l'opportunité de s'assurer que l'expertise était au niveau des besoins de la Commission. De plus, puisqu'un certain nombre de postes étaient devenus vacants du fait de démissions relatives à des changements dans la situation du travail, il convenait d'élire de nouveaux membres. Il fut accepté, afin de préparer l'élection, qu'il est nécessaire de définir le type d'expertise requise dans le Comité, et d'identifier les lacunes techniques qui doivent être comblées. Le Dr De

Clercq et le Prof. Willeberg acceptèrent de préparer un document, qui fut présenté et discuté le 25 janvier **(Annexe 14).**

Les types d'expertise requis furent acceptés, de même que les noms des experts possédant la formation nécessaire. Il a été demandé au Secrétaire d'écrire au CVO de chaque pays où travaille un expert, afin d'expliquer la situation et de demander leur soutien lors de l'élection. Le Comité accepta aussi que, si à la suite d'une élection, une nouvelle vacance de poste intervenait, le document devrait fournir la base pour la sélection d'un expert pour servir dans le Comité.

Point 8. Propositions de changement aux Règles de procédure pour les sessions de l'EUFMD

Le Secrétaire fournit de l'information sur les discussions tenues avec le Bureau juridique de la FAO sur la participation de remplaçants (adjoints) de membres élus aux sessions de la Commission.
Suite à l'avis du Bureau juridique (**Annexe 15**), il proposa qu'un nouveau texte relatif à la participation des remplaçants soit préparé par le Comité Exécutif, dans le but de le faire adopter lors de la Session générale.

Le Comité Exécutif considéra que la participation de remplaçants pourrait aider à maintenir le quorum lors des sessions, mais pourrait conduire à la dilution du profil de la Commission si ces personnes manquaient d'expérience et du statut pour discuter des points de l'ordre du jour. Il fut considéré comme essentiel de limiter l'utilisation de l'option d'envoyer un remplaçant, sans aller aussi loin que de réclamer un jugement avant l'admission d'un adjoint proposé.

Le Comité Exécutif recommanda que:

1. Le remplaçant d'un membre du Comité Exécutif devrait être l'adjoint du Chef des Services Vétérinaires dans l'administration nationale du pays membre élu, ou bien, si ce poste n'existe pas, l'administrateur le plus ancien responsable de la politique de contrôle des maladies contagieuses
2. La formulation offerte par le Bureau juridique de la FAO soit proposée à la Session générale de l'EUFMD pour adoption lors de la 36ème session.
3. Les obligations des membres de participer aux sessions et au travail subséquent de la Commission soient clairement exposées aux membres éventuels, et l'effet de la modification des Règles soit revu lors des sessions suivantes.

Point 9. Points de l'ordre du jour – 36ème Session générale, avril 2005

Le Secrétaire présenta le sujet en appelant l'attention sur les exigences de la Constitution et des Règles de procédure sur les points à inclure dans l'Ordre du jour provisoire. Des points peuvent être inscrits quand ils sont acceptés par le Comité Exécutif ou les Sessions générales lors de précédentes réunions. Un brouillon d'Ordre du jour fut donc préparé par le Secrétariat afin d'inclure les points requis. Le Secrétaire rappela à l'attention que les points régulièrement rapportés à la Session comprenaient le statut des réserves de vaccins et d'antigènes dans les pays membres, et que toutes les 3 Sessions, approximativement, le niveau des capacités de diagnostic était discuté. Quatre points furent soulevés par le Comité technique permanent à l'attention du Comité Exécutif. Ceux-ci étaient:

1. Le Laboratoire mondial de référence, sa fonction internationale et son soutien
2. Les normes de traitement de la viande de porcs provenant de troupeaux vaccinés
3. La capacité de diagnostic sérologique dans les pays membres
4. L'expertise en matière de fièvre aphteuse et la gestion de l'information.

Il fut accepté que les points 1 et 4 devraient être discutés à la Session. Ces sujets sont importants à l'intérieur du Plan stratégique de l'EUFMD. Le point 2 fut considéré comme un sujet technique où les questions requéraient d'être identifiées avec soin, et être ensuite traitées par le Comité technique permanent. Ces questions peuvent avantageusement être identifiées par les membres du Comité Exécutif plutôt que par la 36ème Session; La Présidente et le Prof. Willeberg acceptèrent de discuter et d'identifier ces questions. En cas d'accord, ils prépareraient une requête au Président du Groupe de recherche.

Le point 3 fut examiné lors de la 35ème Session et des recommandations furent faites; par conséquent, un rapport d'avancement serait requis.

Le brouillon d'Ordre du jour à circuler inclurait donc inclure les points indiqués à **l'Annexe 16.** Du fait d'une exigence constitutionnelle à publier l'Ordre du jour au moins 50 jours avant la Session, quelques propositions supplémentaires pourraient être considérées jusqu'à la fin de février.

Point 10. Autres points proposés par le Secrétariat, la Présidente ou les observateurs

Recommandations de la Conférence internationale sur "Les coûts matériels et immatériels du du contrôle des maladies animales"

Peter de Leeuw présenta les principales conclusions et recommandations **(Annexe 17)** de cette Conférence tenue à Bruxelles les 15 et 16 décembre sous la Présidence néerlandaise du Conseil de l'Union Européenne. L'arrière-plan de la Conférence était la survenue de trois crises majeures de la santé animale aux Pays Bas au cours des 10 dernières années, dépassant le plus mauvais scénario qui avait été envisagé lors de l'élaboration de la politique de contrôle. La Conférence fut organisée afin de considérer l'opinion des partenaires sur les aspects du financement des mesures de contrôle et des compensations versées aux éleveurs et autres personnes concernées.

Une des conclusions majeures fut que les organisations de consommateurs ne demandaient pas l'identification des produits provenant d'animaux vaccinés.

Peter de Leeuw appela l'attention sur les recommandations qui étaient en rapport avec les activités de la Commission:

- "...la Communauté ainsi que les Pays Membres individuellement devraient fournir d'avantage de soutien pour le contrôle de ces (maladies animales épidémiques majeures) maladies en dehors de l'UE « (recommandation quatre (R4)). Cela conforte totalement la position selon laquelle des actions défensives devraient être soutenues contre la fièvre aphteuse dans les pays tiers, au delà des frontières de l'Europe, ainsi que recommandé par la Commission EUFMD et la FAO.

- "Des mesures différenciées de contrôle des maladies peuvent être appropriées pour des animaux non élevés pour le commerce et d'autres catégories spéciales"(R 12). Il considéra que les questions liées à la différenciation des contrôles pour les animaux de compagnie devaient être traitées, peut être lors d'ateliers ou de sessions organisées par l'EUFMD.

- "L'industrie et les autorités devraient travailler ensemble pour le développement et la mise sur le marché de nouveaux vaccins et de tests de diagnostic destinés à des objectifs (stratégiques) spécifiques" (R13). Il considéra que la question de l'accès des chercheurs en biotechnologies aux installations réservées à la fièvre aphteuse devrait être traitée. Le lancement le 16 décembre de la Plateforme technologique européenne pour la santé animale globale fut une étape prometteuse; il considéra que la FAO et la Commission EUFMD

devraient jouer un rôle dans la conduite de cette initiative, pour l'établissement des priorités ainsi que pour d'autres aspects relatifs à la compréhension et à l'impact de nouvelles technologies.

- Les recommandations 14 à 16, concernant le financement des mesures de contrôle, avec l'espérance croissante que le producteur pourrait payer le contrôle des maladies – par exemple, "l'UE devrait stimuler l'établissement de schémas d'assurance, et de fonds privés ou publics/privés pour affronter les risques de maladies animales, tout en continuant d'assurer le soutien financier pour la mise en œuvre des mesures communautaires pour le contrôle des maladies animales"(R16). L'exécution de cette recommandation pourrait avoir des avantages significatifs, mais quelques risques, et pourrait éventuellement fournir des modèles pour d'autres régions du monde. Le financement public de la sauvegarde de la santé animale de la Communauté continuerait d'être primordial.

La Présidente considéra qu'il existe plusieurs façons de mettre en œuvre les recommandations, et une des responsabilités des CVO est de développer et d'aider à la réalisation de la Politique de santé animale communautaire pour l'UE. Des réunions d'évaluation de la politique de la Communauté sont prévues et la présence du Dr Marabelli dans le Groupe de direction pour ce travail aidera à la liaison avec la FAO/EUFMD.

Le Dr Marabelli indiqua que l'UE tente d'équilibrer les sources de financement publiques et privées. Il considéra qu'il pouvait être dangereux de compter sur l'industrie pour contrôler ou pour financer le contrôle dans les régions où l'incidence des maladies est plus importante.
Le Dr Belev fit ressortir le besoin d'avoir des services vétérinaires dotés de structures, de finances et d'une organisation capable de prendre les mesures de contrôle nécessaires.

La Présidente exprima son souci sur le fait que le développement de la structuration du contrôle des maladies peut aboutir à l'autonomie entre ceux qui certifient la santé d'un "compartiment" et ceux de l'Etat où les animaux sont localisés. Elle avait soutenu l'initiative de l'OIE d'organiser une réunion en septembre sur l'organisation des services vétérinaires, car il existe différents modèles.

Clôture de la session

La Présidente remercia les membres et les observateurs pour leur participation à la session. Elle remercia le Secrétaire et Mme Fragiotta pour leur hospitalité et pour les arrangements afin d'assurer le calme et le succès de la réunion. Elle considéra que des progrès avaient été faits sur plusieurs fronts, mais regretta que l'accord avec la CE pour la période à venir soit requis pour assurer que l'impulsion et le progrès dans d'autres domaines, particulièrement des activités de terrain, puissent continuer en 2005.

Au nom du Comité Exécutif, elle fit part de son appréciation des efforts de Dónal Sammin à soutenir le contrôle de la fièvre aphteuse en Europe au cours des deux dernières années. L'impact de son travail sera conservé dans les années à venir dans les nombreux rapports et publications et dans les mémoires de ceux qui ont travaillé avec lui. Elle saisit aussi la chance de remercier le gouvernement de l'Irlande pour son soutien au cours des années passées, et pour leur réponse rapide à la 70ème session tenue à Dublin, sous la forme du remplacement de l'Expert Associé, lequel devrait débuter en février.

Appendix 1

71st Session of the Executive Committee of the European Commission for the Control of Foot-and-Mouth Disease

24+25 January 2005
Pakistan Room (A-127), FAO HQs
Rome, Italy

PROVISIONAL AGENDA

1. Adoption of the Agenda

2. Update since the 70th Session
   - Report of the Tripartite for the Balkans
   - Report on vaccination and surveillance for FMD in the South Caucasus
   - Iran surveillance project
   - Report on the Research Group Session held in Crete

3. Strategy paper - EUFMD over the next 4 years

4. EC funding - revision of the EC/EUFMD Implementing Agreement

5. Work programme of the EUFMD Commission for biennium 2005-2006

6. Budget of the Commission in biennium 2006-2007

7. Election of the members of the Research Group of the Standing Technical Committee

8. Proposed Changes to Rules of Procedure for EUFMD Sessions

9. Items for the Agenda - General Session April, 2005

10. Other items as proposed by Secretariat, President or Observers

Approximate timetable

Time	Item		
Monday, 24 January			
9.00	1	Adoption of the Agenda	
	2	Update since the 70th Session	
9.15		- Report of the Tripartite for the Balkans	Secretariat Follow up: Turkey, Greece OIE, EC representatives
		(- Report on the development of FMD investigation	Dónal Sammin

		guidelines)	
10.15	Coffee break		
10.45		- Report on vaccination and surveillance for FMD in the South Caucasus	Carsten Pötzsch, FLI Germany, FAO Consultant
11.30		- Iran surveillance project	Secretariat/Alf Füssel, DG-SANCO
11.45		- Report on the Research Group Session held in Crete	Kris de Clercq, Preben Willeberg
12.30	Break		
2.00	3	Strategy paper – EUFMD over the next 4 years	Secretariat
2.40	4	EC/EUFMD-FAO implementing agreement	Sumption/Dini (FAO), Füssel DG-SANCO
3.20	Break		
3.40	5	Work programme for the upcoming year (2005-6)	Secretariat
4.15	6	Budget of the Commission, 2006-7 biennium	Secretariat
4.45	7	Election of members of the Research Group of the Standing Technical Committee	
5.00	8	Proposed change to Rules of Procedure for the EUFMD Commission	Secretariat
5.15	Finish		
Tuesday, 25 January			
9.00	9	Agenda for the 36th General Session, 2005	President, Secretariat
10.00	Break		
10.30	10	Items held over from first day	
		WRL report	David Paton
		Other items as proposed by Secretariat, President, Chairman of the research group and Observers - Follow up to the Brussels Conference - "material and immaterial costs of animal disease control"	Peter de Leeuw
12.30	Break		
2.00		Points of Agreement for entry to the report	
3.00	Close	Closing of the Session	

Appendix 2

Recommendations

FAO/OIE/EC Tripartite meeting on control of Foot-and-Mouth Disease and other exotic diseases in the southern Balkans

Held on 4 and 5 November 2004 in Sofia, Bulgaria

1. Co-operation between countries of the region in developing capacity and expertise in disease surveillance and control should be further developed and encouraged, in order to achieve a functioning early warning system for animal diseases that will assist each of the countries involved.

Relating mainly to control of FMD:

2. Turkey is recommended to continue vaccination against FMD in Thrace region and to progress towards the standards required to gain the OIE status of freedom from FMD with vaccination.
3. FMD bi-annual vaccination of large ruminants and once annual vaccination of small ruminants should continue in 2005 in Thrace region, with oil adjuvanted vaccine that meets international quality standards.
4. Surveillance actions, with a view to identifying key parameters for measurement to assess the level of implementation and success of disease control measures, should be conducted in 2005-2006 in areas of Anatolia considered to be informative for the national FMD situation. The EUFMD Commission should assist Turkey to develop and undertake these actions.

On surveillance and disease notification in Thrace region

5. Thrace region of Turkey should be considered a special region for disease investigation and reporting; cases of List A diseases occurring in this region, and other diseases where occurring for the first time, should be notified without delay[1] to the neighbouring countries, and also to OIE, EC and FAO.
6. The monthly reporting of "list A diseases" to the neighbouring countries, the OIE, EC and FAO should be continued in 2005, and accompanied by maps indicating the areas affected.
7. Heightened clinical surveillance, and a programme for serological surveillance should be conducted in the border regions of Greece and Bulgaria with Turkish Thrace, for FMD, PPR, BT and SGP in 2005.
8. In each of the countries, training and awareness campaigns, for veterinarians and others in responsibility for livestock health, in the recognition and reporting of suspicions of PPR and other exotic diseases is recommended.
9. In Turkish Thrace, heightened clinical surveillance is needed to ensure early detection of FMD PPR, BT and SGP [remove repetition of PPR].
10. The 2004 programme for sero-surveillance in Turkish Thrace region should be continued but revised to place emphasis on the detection of vaccination or infection responses in the most informative age categories (young animals).
11. The surveillance system for FMD, including sero-surveillance, should be reviewed, with consideration being given to harmonisation of the surveillance actions of Greece and Bulgaria[2], in the region of the border with Turkey.

[1] Without delay is considered by neighbouring countries to be "within 24 hrs of confirmation"
[2] The NVS of Bulgaria suggest this to be through use of serological methods based on detection of antibodies to NSP

12. This review should also provide guidance on the follow-up measures to be adopted for animals which test positive for antibodies to NSP antigens of FMDV. A working group should be established to carry forward this task, with veterinary experts from the laboratory and administrative services.

On control of PPR
The Turkish authorities are recommended to :

13. adopt the policy of eradication of PPR infection from Thrace region, and to implement this in the fastest and more practicable manner, and to establish the necessary control on animal movements so to prevent the further entry of infection.
14. to establish a epidemiological investigation unit for Thrace region , answerable directly to the GDPC, to co-ordinate disease control activities in this region and to complement the work of the Provincial Directorates.
15. develop an emergency management plan for PPR in Thrace region, taking into consideration the findings of the EUFMD Mission Report and the Tripartite Meeting held in Sofia, and to make this known to the neighbouring countries via the EUFMD Secretariat, by the 19th November .
16. permanently mark vaccinated animals, for example by permanent marking of the ears.
17. strictly control, under the authority of the GDPC, the use of PPR vaccine in Thrace region to ensure that the quality of vaccine used, the animal population to be vaccinated, the vaccination team and the marking of animals are officially recorded, and the information is readily available to MARA staff.
18. develop a programme for heightened clinical surveillance for PPR and other animal diseases in Thrace region, with emphasis on early detection of infection in epidemiological relevant livestock markets.

The international organizations should

19. support MARA to independently assess the quality and safety of PPR vaccine produced by the Etlik Institute,
20. consider if OIE standards could be revised to allow RP vaccine to be used as a marker vaccine for PPR, specifying if it is possible to mitigate the negative impact on OIE rinderpest freedom accreditation.

Mainly relating to surveillance and control of bluetongue

21. A surveillance plan for BT should be developed by MARA, focusing in 2005 on areas of the Aegean coast of Turkey, (Marmara, places on Aegean coast in proximity to the Greek islands...), which may represent high-risk locations for Culicoides vector and livestock host distribution.
22. Experts from Greece and Bulgaria should be encouraged to collaborate in the development of the plan, and to assist MARA to identify (by March 2005) the support (additional inputs) required to implement the plan in the main risk period in 2005. FAO should assist in this process and facilitate the development of a regional project to follow on from the FAO TCP project for Thrace region.
23. Turkey is encouraged to develop, with FAO assistance, a TCP project to enable the early detection of exotic disease risk in the eastern Mediterranean region, together with Syria and Cyprus. Technical support from Greece and Bulgaria is encouraged.

FAO-EUFMD/EC/OIE Tripartite group Meeting on the Balkans
Sofia, Bulgaria, 4+5 November 2004

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Appendix 3

A proposal for FMDV-NSP serosurveillance in juvenile cattle in Turkish Thrace, 2005

Background

Although foot-and-mouth disease (FMD) is endemic in Anatolia, no outbreaks of the disease have been reported from the Thrace region of Turkey since 2001. Cattle in this region are vaccinated twice yearly in Spring and Autumn with a trivalent vaccine (produced by the Şap Institute) against serotypes O, A and Asia 1 whilst small ruminants are only vaccinated in Springtime. In 2003 and 2004 serosurveillance was conducted two months after the Spring vaccination campaign. One hundred villages were randomly selected from the region and in each of these villages blood samples were collected from 24 cattle and 24 small ruminants. Sera were tested at the Şap Institute by liquid phase blocking ELISA (LPBE) to assess protective antibody titres (to each of serotypes O, A and Asia) and then by an ELISA to detect antibodies to the non-structural proteins (NSP) of FMD virus, to discriminate between animals that were seropositive simply because of vaccination and those that may also have been infected following field exposure to the virus. In both years only a small percentage of the overall sample was NSP seropositive (1.9% and 2.2% for cattle in 2003 and 2004, respectively) but a number of "clusters" of seropositive animals were identified. A detailed follow-up investigation of clusters of NSP seropositive animals (identified in the 2004 serosurvey) was conducted by Dr Naci Bulut and colleagues from the Şap Institute in September 2004. Dr Bulut requested assistance in the interpretation of the results obtained in the serosurvey and follow-up investigation and also advice on how serosurveys might be designed in future years with a view to providing greater confidence that FMD virus is no longer circulating in the Thrace region. A series of recommendations at the FAO/OIE/EC tripartite meeting for the Souther Balkans (Sofia, 4-5 November 2004) required the EUFMD Secretariat to provide such advice and assistance as a matter of urgency. Therefore the Secretariat (with the co-operation of Dr Alf Fuessel, DG-SANCO) organised a meeting in Brussels between Dr Bulut, Dr David Paton (representing the FAO/OIE world reference laboratory for FMD, Institute for Animal Health, Pirbright, UK), Dr. Kris de Clercq (Chairman, EUFMD Research Group) and the reporting officer (RO).

As serosurveillance can be used to establish either: (i) the absence of evidence of virus circulation; (ii) evidence of field efficacy of vaccine and/or (iii) the extent of protective immunity in a vaccinated population, it was first necessary to discuss what should be the primary objective of the serosurvey to be conducted in Thrace in 2005. It was agreed that priority in design of the survey for the coming year should be given to demonstrating the absence of virus circulation in the vaccinated population (by testing for NSP antibody) as distinct from demonstrating effective vaccine coverage of this population (by testing for serotype-specific antibody with the LPBE). It was thought impractical (if not theoretically impossible within constraints of field collection and laboratory testing capacities) to attempt to demonstrate both with the same survey design.

Serosurvey Design

In designing the serosurvey the following was assumed:

(1) it would be sufficient to focus serosurveillance exclusively on cattle in 2005 as large and small ruminants were considered to be at equal risk of exposure
(2) it would be best to target juvenile animals (cattle less than two years of age but not including calves less than four-months-old because of possible interference due to colostral antibody) as older cattle might be NSP seropositive as a consequence of multiple vaccination or due to exposure some years before)
(3) that serum to be tested for NSP antibody be collected at the time of vaccination
(4) a two-stage sampling strategy would be used to reflect the fact that animals are grouped together in epidemiological units (herds/villages)
(5) villages (as distinct from herds) constitute the appropriate primary sampling units

(6) a 2% prevalence of "infected villages" and a 5% within-village prevalence would be expected
(7) the NSP antibody ELISA is imperfect but would provide 90% diagnostic sensitivity and 99% diagnostic specificity; the Şap institute propose to use the cedi-diagnostics test.
(8) the Şap institute would be able to test at least 10, 000 sera for NSP antibody; the Şap institute have increased serodiagnostic capacity (in part because of equipment for automated testing provided by EUFMD) since design of FMD serosurveillance in Thrace was first considered in 2002 (at which time the capacity of the laboratory to test only 5000 sera dictated the survey design)

Therefore to have 95% confidence in the results of the survey would require that 152 villages were randomly selected (from more than 900 villages in the region) and that 64 cattle were randomly selected from the juvenile population in each village. This will require that serum be collected for serological testing from a total of 9,728 cattle

For statistical validity and to have sufficient confidence in the results of the serosurvey, it is essential that both "sampling" steps are randomised. The first random-sampling step can be very rapidly completed before the FMD vaccination campaign commences in Spring 2005 using an excel database of all the villages in the region (which is already available in GDPC). The second sampling step can be accomplished in one of two ways: either (i) by conducting a census of all juvenile cattle in selected villages immediately prior to vaccination and randomly selecting 64 animals from this list OR by individually identifying (eartagging) and bleeding all juvenile cattle in each of the selected villages at the time of vaccination and thereafter, randomly selecting 64 specimens per village.

Interpretation and Follow-up
The following steps must be taken during the initial field collection and laboratory testing of sera if a detailed follow-up protocol is to be attempted for positive sera and NSP seropositive animals: (i) all sampled animals must be eartagged and the specimens clearly labelled with the eartag number; (ii) after initial laboratory testing the original sera should be stored at -20°C; (iii) all of the relevant details on each sampled animal including the raw data from ELISA testing should be entered on a computerised database (excel worksheet or equivalent) to facilitate data analysis.

If serum tests positive, repeat the test and if again positive with this first NSP antibody detection ELISA (Cedi test) another readily-available test (Bommeli test or send sera to IZSLER to be tested using the Brescia ELISA) should be used to provide confirmation. If confirmed NSP antibody positive the serum should be titrated with the LPBE for antibody levels against types O, A and Asia 1.

Data analysis: (i) look at the magnitude of the positive results as the more positive the result the more likely it is that the animal is truly seropositive and (ii) examine for evidence of "clustering" of NSP seropositives by village or by age cohort as this also will help to separate "true positives" from "false positives". If a "cluster" of NSP seropositive cattle (defined for the purposes of this survey as being three or more seropositive cattle) is identified in a village, the village should receive a follow-up visit from an investigation team which would seek to re-bleed the NSP seropositive animals and collect probang samples. Further juvenile animals in the village should be sampled, including cattle from the same holding (as the positives) and cattle from neighbouring holdings.

FMD vaccine control - field efficacy of the vaccine

As against trying to prove efficient vaccine coverage, it would be useful to first provide statistically significant evidence showing the field efficacy of the vaccine by comparing LPBE titres of young cattle pre-vaccination and 60 days post-vaccination. In order to do this a second randomised selection should be made to select 15 villages from those already selected (this would preferably be stratified by province for practical resource reasons so that three villages are selected from each of the 15 provinces in the Thrace region). Each of these villages would be revisited by the local veterinary services in June 2005, 60 days after FMD vaccination and all of the animals which were "sampled" at the time of vaccination would be re-bled (assuming that all animals have been individually-identified and their identities recorded). Paired sera from each animal would then be tested at a dilution of 1:100 by LPBE for all serotypes to assess percentage protection (and possibly also titrated against one of the serotypes to assess antibody titre).

Appendix 4

Country Report of Turkey

1. FMD situation and FMD control programme in Turkey

1.1. Disease situation

Although the disease is endemic in Anatolia Region, FMD outbreak has not been reported in Thrace Region since June 2001. Two serotypes, O and A, have been circulating in Anatolia Region. Outbreaks due to type Asia 1 has not been reported since April 2002 in Turkey.

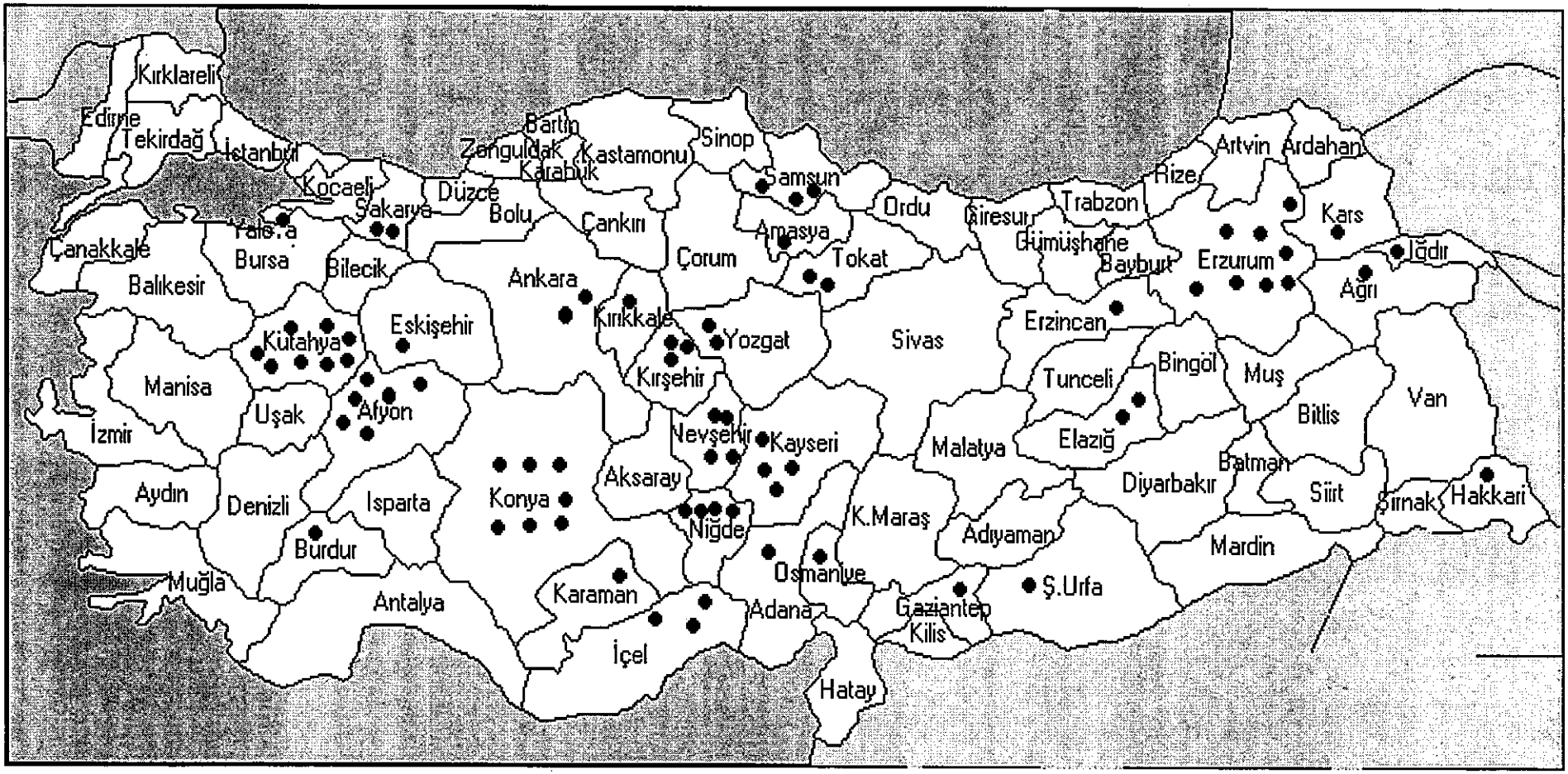
In order to prevent the entrance of new virus types into Turkey, a surveillance program has been introduced in the south eastern border regions. Also the restriction of animal and animal product movements, quarantine, intensive vaccination programs and active monitoring and surveillance programs have been introduced. A vaccination campaign is carried out for bovine animals twice a year. In case of outbreaks, ring vaccination program is applied in the focus. Due to the insufficiency in the vaccine production and unwillingness of the farmers, vaccination of the sheep can not be carried out under a nationwide program. Diagnosis, research and vaccine production services are carried out by Foot and Mouth Disease Institute, located in Ankara.

In 2004, 75 outbreaks have been reported, 51 due to type O and 23 due to type A and 1 due to types O and A . Detailed figures of FMD outbreaks in 2004 are given Table 1.

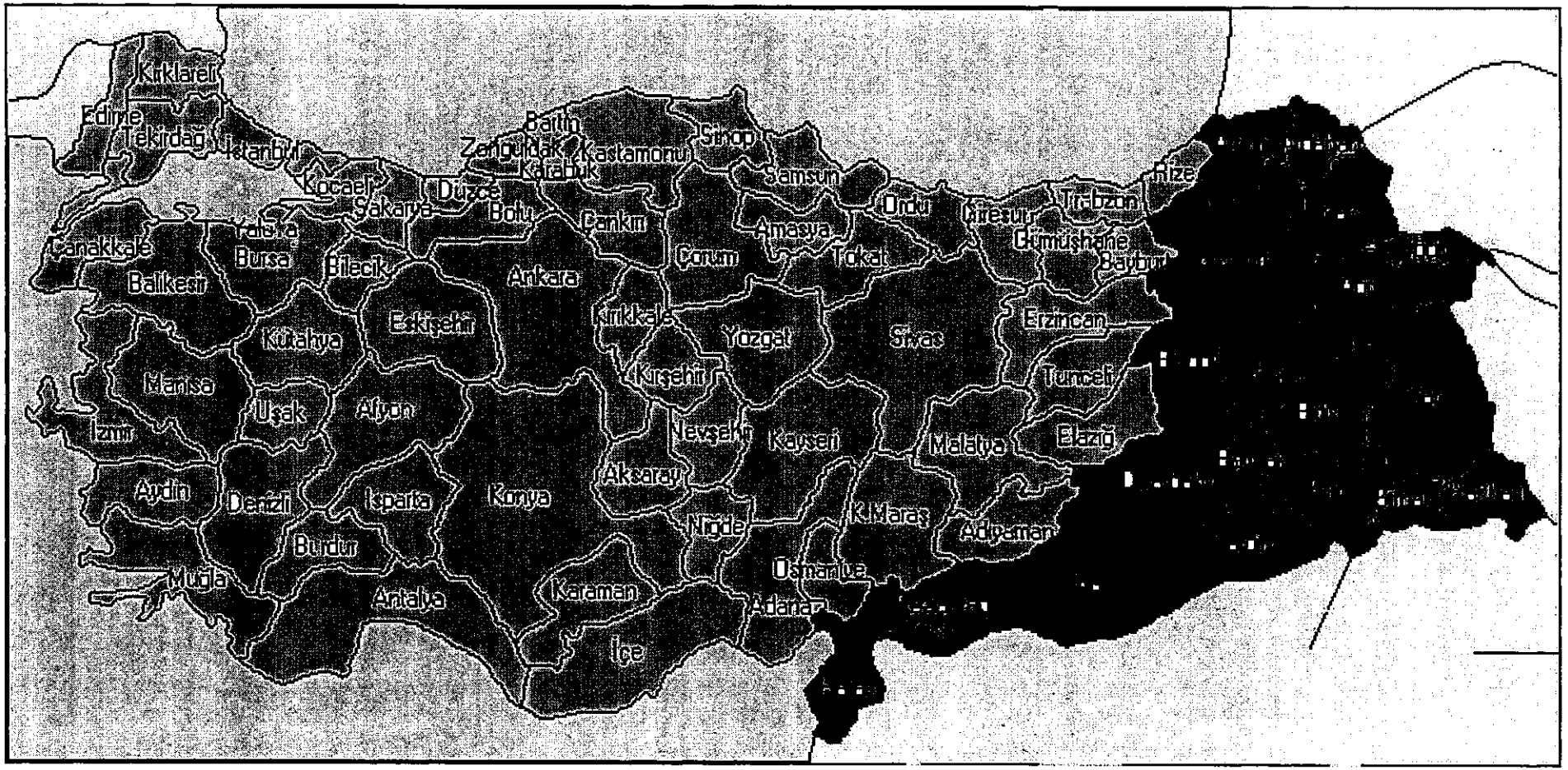
Table 1. Detailed figures of FMD outbreaks in 2004

Mounth	Outbreaks				Susceptible		Cases		Deaths	
	Type				Bovine	Ovine	Bovine	Ovine	Bovine	Ovine
	O	A	O+A	Total						
January	4	1		5	367		85		4	
February	7	3		10	76		47	36		8
March	2	3		5	147	4	29			
April	6	1		7	404		195			
May	5	2		7	2034	200	85	400		8
June	7	2		9	2090	1200	158	125		
July	4	4		8	461	600	248	3417		
August	5	1		6	3667	4000	50			
September	2	5	1	8	4950		1149		4	
October	6	1		7	517		80			
November	1	1		2	68		9			
December	1			1	11		6			
Total	51	23	1	75	14792	6004	2141	3978	8	16

FOOT AND MOUTH DISEASES OUTBREAKS IN TURKEY IN 2004



FOOT AND MOUTH DISEASES VACCINATION IN TURKEY IN 2004



Bivalent FMD vaccination regions

Trivalent FMD vaccination regions

1.2. Vaccination programme in 2004

Mass vaccination policy is the main element of the control programme of the disease in 2004. Vaccination programme for 2004 is as follows:

- Trivalent vaccine, consist of O1 Manisa+Aydın 98 (with the homologue A Iran 96) +Asia 1), produced by FMD Institute was used in the campaigns.
- Two round mass vaccination campaigns, in spring and in autum, was planned to carry out for large ruminants. The target of vaccination campaignst was the vaccination of at least 80 % of large ruminants nationally.
  - -Spring vaccination campaign, between March-April
  - -Autum vaccination campaign, between September and October
- A mass vaccination campaign was planned to carry out out in spring (February, March and April) for small rumuninants in Thrace and Marmara Regions.
- Strategic vaccination was carried out in some provinces located in the Black Sea Region.
- Application of ring vaccination around the outbreaks.
- Applying of vaccinations strategy was planned to start from border regions and continued towards internal regions of the Country.

Spring vaccination campaign was carried out between 15 March and 15 May 2004.
In the framework of the vaccination campaign 87 % of large ruminants and 91% of small ruminants in Thrace Region and 83 % of programmed large and 82 % small ruminants in Anatolia Region were vaccinated respectively. Spring vaccination figures are given in Table 2 and 3 as follows:

Table 2. Vaccination figures for the first round of 2004 in Turkey

Region	Vaccination programme of animals		Vaccination			
	Large rum.	Small rum.	Large rum.	%	Small rum.	%
Thrace	347152	550 708	301 595	87	500.920	91
Anatolia	6.313.218	1.549.728	5.271.026	83	1.277.797	82
Total	**6.660.370**	**2.100.436**	**5.572.621**	**84**	**1.778.717**	**85**

Table 3. Vaccination figures for first round of 2004 in Thrace

Province	Vaccination programme of animals		Vaccination			
	Large rum.	Small rum.	Large rum.	%	Small rum.	%
CANAKKALE	9.150	60.000	8.464	93	59.889	100
EDIRNE	127.152	186.188	107.756	85	173.079	93
ISTANBUL	40.900	34.500	40.166	98	32.873	95
KIRKLARELI	63.500	125.200	61.182	96	118.504	95
TEKIRDAG	106.450	144.820	84.027	79	116.575	80
Total	**347.152**	**550.708**	**301.595**	**87**	**500.920**	**91**

Autumn vaccination campaign in 2004
Autumn vaccination campaign was carried out between September and October 2004. Trivalent and bivalent vaccine produced by FMD Institute was used. Although 85.5 % of large ruminants were vaccinated in Thrace Region, 76 % of programmed large ruminants were vaccinated nationwide. Spring vaccination figures are given in Table 4 and 5 as follows:

Table 4. Vaccination figures for the second round of 2004 in Turkey

Region	Vaccination programme of animals		Vaccination			
	Large rum.	Small rum.	Large rum.	%	Small rum.	%
Total	**6.486.250**		**4.957.328**	**76**		

Table 5. Vaccination figures for second round of 2004 in Thrace

Province	Vaccination programme of animals		Vaccination			
	Large rum.	Small rum.	Large rum.	%	Small rum.	
CANAKKALE	9.150		2007	21,9		
EDIRNE	127.152		108414	85,3		
ISTANBUL	40.900		32722	80,0		
KIRKLARELI	63.500		62362	98,2		
TEKIRDAG	106.450		91390	85,9		
Total	**347.152**		**296.895**	**85,5**		

Sero-survey in 2004

Following the spring vaccination a sero survey is planned in Thrace region to determine immunity level of animals vaccinated by trivalent FMD vaccine and monitor antibodies against non structural proteins (NSP).

Another sero survey is carried out in order to monitor antibodies to non structural proteins (NSP) in small ruminants in provinces among in the Eastern and South Eastern Borders.

FAO-TCP-RER-2903 Project in Thrace region has assisted in the provision of the diagnostic kits, training for monitoring and surveillance for the diseases, including GIS.

1.3. FMD control in Thrace region-outlook and options

- Recommendation for taking into consideration the findings of the EUFMD Mission Report and the Tripartite Meeting held in Sofia will be considered.

- Registration and identification of cattle and small ruminant,
- Control of animal movement control; restriction of animal and animal product movements and quarantine and road control.
- Vaccination program (bivalent FMD vaccine (O1 Manisa+Aydın 98 (with the homologue A Iran 96)). AlOH and oil adjuvanted FMD vaccine will be used in spring vaccination campaign, and it is planned to use oil adjuvanted FMD vaccine in autumn vaccination campaign for all animals in 2005.
- Surveillance and monitoring program
    - Establishment of the Local Diseases Control Center (Pendik VCRI)
    - To monitor of FMD, sero-surveillance and field investigation will be carried out repeatedly next years
- Slaughtering and compensation of the infected animals in Thrace Region,
- To get the local administration and other ministries' support
- Training of dealers
- Other stricts measures
- Free of FMD studies of Turkey would be started from Thrace region
- Notification of the diseases will be sent to OIE, EU and neighbouring countries without delay accompanied by maps indicating the areas affected as soon as possible.

1.4. Surveillance and Control of FMD in Eastern Anatolia

- Registration and identification of cattle and small ruminant,
- Control of animal movement control; restriction of animal and animal product movements and quarantine and and road control,

- Vaccination program, (trivalent FMD Vaccine (O1 Manisa+Aydın 98 (with the homologue A Iran 96) +Asia 1) in Eastern Buffer Zone (19 provinces) and bivalent FMD vaccine (O1 Manisa+Aydın 98 (with the homologue A Iran 96)) in other region. AlOH and oil adjuvanted FMD vaccine will be used in spring vaccination campaign, and it is planned to use oil adjuvanted FMD vaccine in autumn vaccination campaign for all animals in 2005.
- Surveillance and monitoring program,
    - Establishment of the Local Diseases Control Center
- To get the local administration and other ministries' support
- Training of dealers
- Other strict measures

2. Current epidemiological situation and control of other exotic diseases

2.1. Other exotic diseases control in Thrace region-outlook and options

- Recommendataion for taking into consideration the findings of the EUFMD Mission Report and the Tripartite Meeting held in Sofia will be considered.
- A program for serological surveillance in the border regions of Greece and Bulgaria with Thrace for PPR, BT and SGP.
- Clinical surveillance will be carried out for early detection of PPR, BT and SGP
- Mass vaccination program for PPR
- Other stricts measures

2.1.1. Buetongue

No case has occurred since May 2000.

Control program of BT

- To continue investigation of vector culicoides species, distribution and activities
- Vector control by systematic insecticide treatment
- To vaccination susceptible animals in infected area which was outbreak occurred in the last years.
- To control of movement of sheep to higher altitudes in active vector season.
- Service in training of trainer and field veterinarian and improvement of awareness of farmer and public.

2.1.2. Peste des petits ruminants (PPR)

39 outbreaks PPR were reported in 2004.

Control programme of PPR

- Service in training of trainer and field veterinarian and improvement of awareness of farmer and public.
- Surveillance and monitoring program
- Vaccination program where the outbreak occurred.
- Ring vaccination for susceptible animal when the outbreak occurs.
- Other strict measures

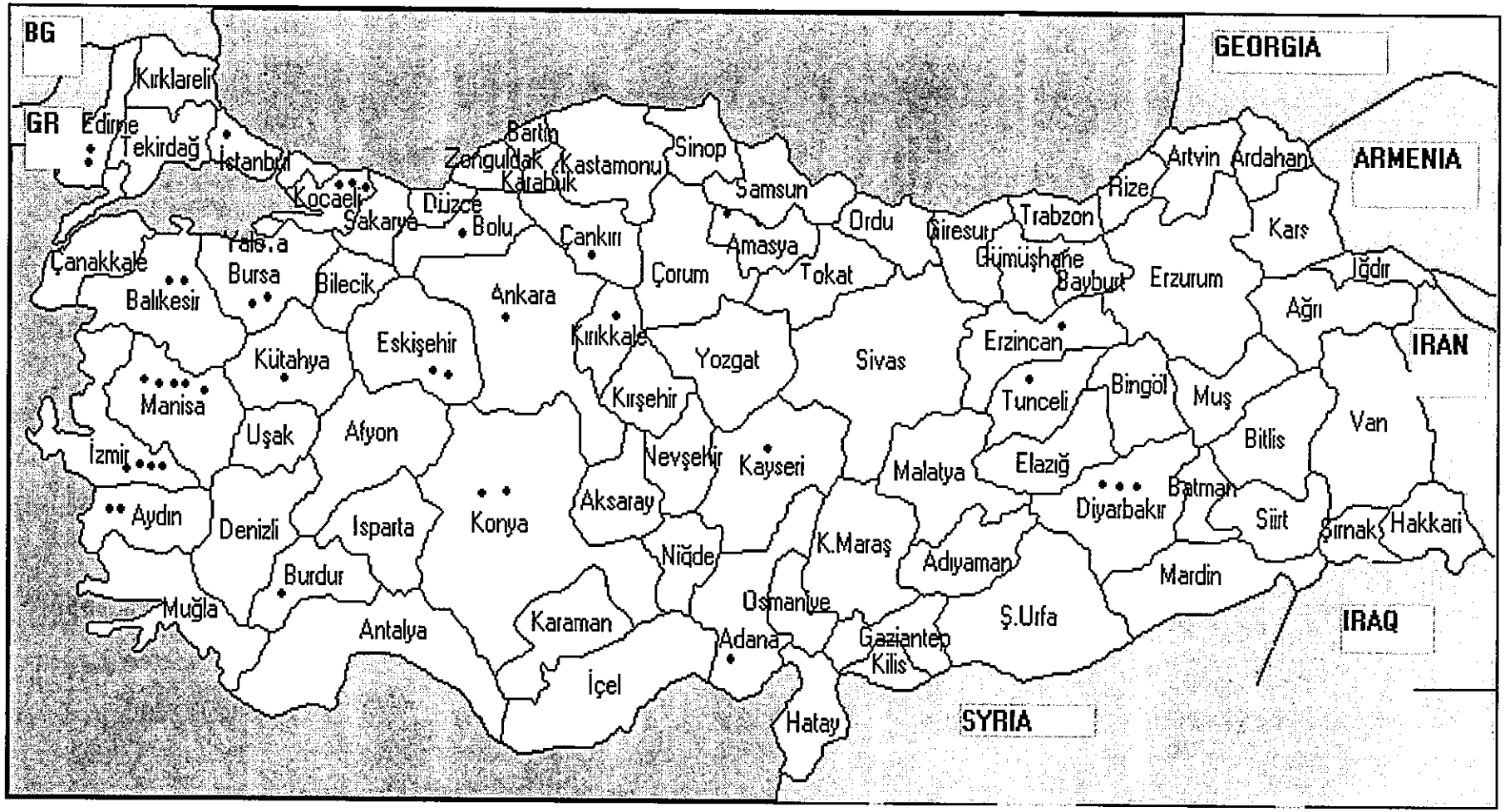
2.1.3. Sheep and Goat Pox

131 outbreaks were reported in 2004.

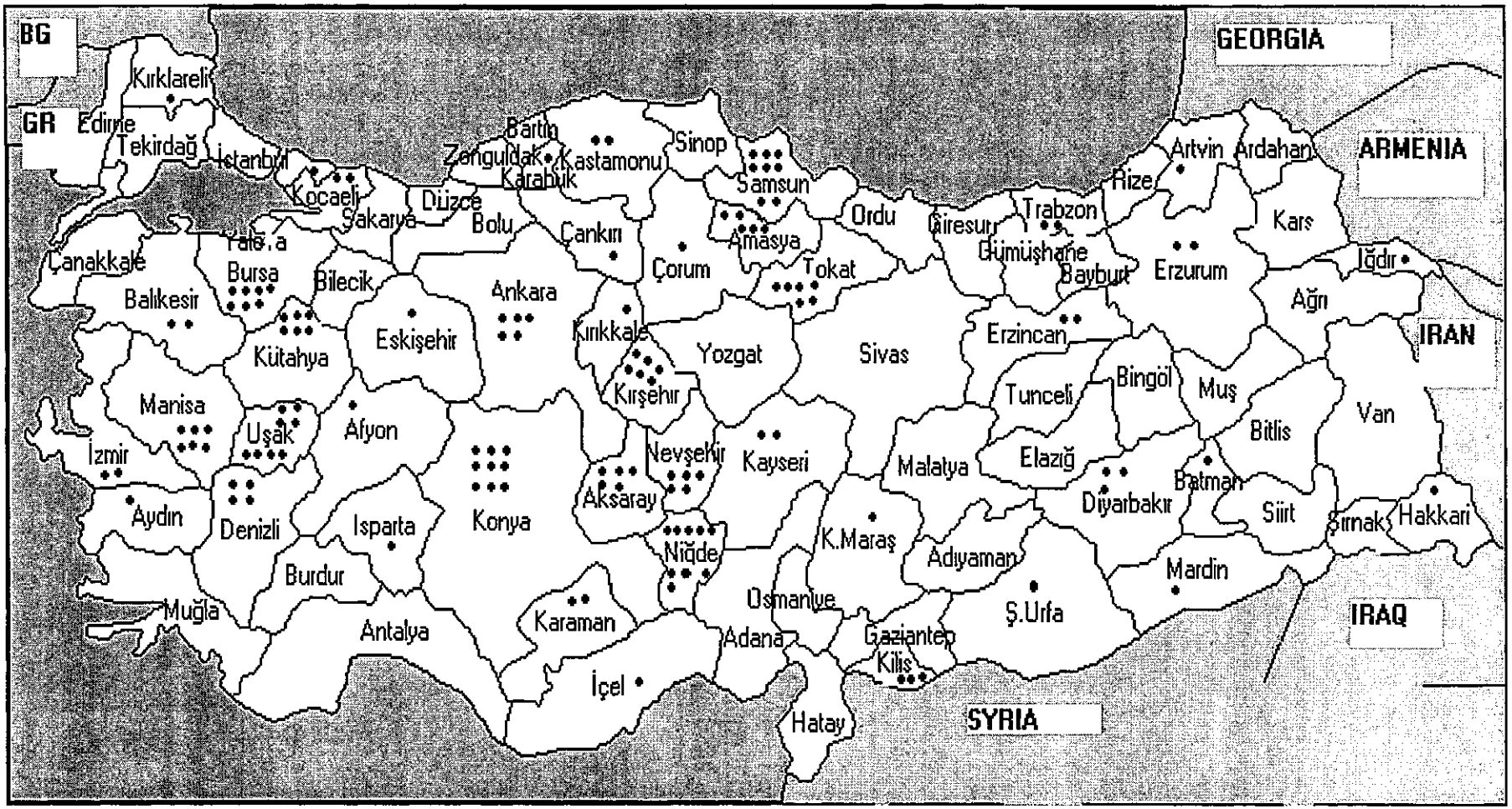
Combat programme of Sheep and Goats pox

- To take control measures in accordance to Law 3285 infected area and if disease occurs.
- Ring vaccination of small ruminants on the surrounding of outbreak.
- To vaccination susceptible animal in infected area which is outbreak occurred in the last five year.

PPR OUTBREAKS IN TURKEY, 2004



SHEEP and GOAT POX OUTBREAKS IN TURKEY, 2004



Appendix 5

Mission to Trans-Caucasus (Georgia, Armenia and Azerbaijan), October/November 2004

Provisional Recommendations after Mission I

of the EUFMD consultant Carsten J. Pötzsch
Friedrich-Loeffler Institute, Germany
Food and Agriculture Organization of the United Nations
January 2005

FMD vaccine use

- Storage facilities are urgently needed in Georgia and Azerbaijan as to ensure vaccine quality; on a central level: fridge containers (Georgia), on a regional and county level: fridge containers/fridges, generators, cool boxes and ice packs
- Fresh stocks of vaccine should only be delivered shortly before the beginning of the vaccination campaign, especially to Georgia
- Vaccination campaigns should be conducted as quickly as possible
- The quality of vaccine stored under unfavourable conditions should be investigated
- Temperature records should be kept for vaccine storage on all levels

Gaps in FMD vaccination cover

- Vaccination strategies should be development for entire countries, including the buffer zone
- The FMD situation in Nagorny Karabakh and Abkhasia needs assessment
- Regularity of vaccination campaigns should be ensured

Proposed sero-surveillance plans

- Baseline sero-surveillance investigations in the entire countries are recommended to follow up issues of NSP positive results in 2003 and to estimate the level of antibodies to structural proteins
- Follow-up surveillance should be targeted and based on the results of the pilot and baseline sero-surveillance investigations
- The quality of the Armenian vaccine needs investigation

Surveillance training

- Epidemiological knowledge, diagnostic facilities and transparency have to be improved to introduce more risk-based vaccination and surveillance schemes
- Hands-on training could be provided by supporting the implementation of the sero-surveillance plans by external expertise

General recommendations

- Cooperation between the South Caucasus countries, and Turkey and Iran in FMD surveillance and control is necessary
- FMD surveillance and control activities should be regularly assessed and adjusted
- Close cooperation between FAO, and the EU Food Security Programme and the US Biosecurity Programme is recommended
- Agreements on mid and long-term aims of FMD control and surveillance between the South Caucasus countries and FAO should be reached
- The role of ARRIAH, Russia should be defined
- Georgia could be designated a regional FAO focal point for FMD control and surveillance.

Mission to Trans-Caucasus (Georgia, Armenia and Azerbaijan), October/November 2004

Preliminary Report

of the International Consultant Carsten J. Pötzsch

Food and Agriculture Organization of the United Nations

19 November 2004

Terms of Reference

1. Implement, and where required contribute to improving the design of a program for inspection of the use made of FMD vaccine provided by EC through FAO for the purpose of maintaining a buffer zone of immunity to FMDV in the border regions of each country with Turkey and/or Iran.
2. Identify areas in the buffer zone where gaps in vaccination cover might occur, and through liason with Government veterinary services and with FAO in the countries concerned, develop and monitor implementation of plans to address these gaps, particularly the issue of potential gaps in cover in disputed territories.
3. Develop sero-surveillance plans to resolve issues of nonstructural protein (NSP) positives identified during sero-surveillance in 2003, particularly in border regions of Georgia with Armenia. Develop plan for studies to resolve issues of induction of NSP positives by locally produced FMD vaccines. This might be combined with other studies on potency/quality of locally produced vaccines, developed with national services.
4. Collate information on the elements of the animal disease reporting system in each country, and provide to FAO on inputs required to address weaknesses in the passive surveillance system for FMD.
5. In subsequent missions (2 and 3), provide technical support and advice relating to the studies designed in points 3 and 4, particularly the analysis of data

Summary

The objectives of the mission were to inspect the use made of FMD vaccine provided by EC through FAO in the border regions of Georgia, Armenia and Azerbaijan with Turkey and/or Iran. Furthermore, gaps in vaccination cover in this buffer zone should be identified and plans developed to address these gaps. To resolve issues of NSP positives in 2003 sero-surveillance plans should be developed.

Vaccination was carried out in the buffer zone apparently using the amount of vaccine doses provided by FAO/EC. No FMD outbreaks have been reported in the three countries in 2003 and to date in 2004. Given the relatively ineffective passive surveillance systems, the true occurrence of FMD remains unclear. The reported EC/FAO vaccine coverage in the buffer zone in spring 2004 was between 88.8 and 100% for cattle and between 0% (Armenia) and 73.1% (Georgia) for small ruminants. Especially in Georgia and Azerbaijan the cold chain for vaccines was not thoroughly maintained. The veterinary services of all three countries suffered from very limited resources, a situation that hampers FMD surveillance and control. Main gaps in vaccination cover in the buffer zone could be caused by large numbers of not sufficiently vaccinated sheep and young stock, with sheep often migrating long distances to seasonal pastures. A possible geographical gap of vaccination cover could exist between Nagorny Karabakh and Iran. The buffer zone is also bypassed by official and informal national and international trade of livestock and animal products.

Two sero-surveillance pilot studies were designed and asked to be carried out in the buffer zones of Georgia and Azerbaijan for follow-up of issues of NSP positives and to begin with national FMD sero-surveillance. Armenia has started FMD surveillance in 2004. The testing of 4,033 cattle samples indicated an average antibody level of 32.4% against serotype A, 34.6% against serotype O and 10.4% against serotype Asia1.

To safely move to a more risk-based vaccination and surveillance scheme, epidemiological expertise, diagnostic facilities, transparency and cooperation with neighbouring countries have to be vastly improved.

Findings

1. Vaccination campaign

Use of FAO Vaccine

Vaccination was carried out in Georgia, Armenia and Azerbaijan in the buffer zone to Iran and Turkey apparently using the amount of vaccine doses provided by FAO/EC (Table 1). The time schedule of vaccine distribution and use is shown in Table 2.

Tab. 1. Planned use of vaccine doses delivered to Georgia, Armenia and Azerbaijan in autumn 2004

Country	No. of animals (latest national census)	No. of FAO vaccine doses	theoretical vacc. coverage
Georgia	316,268 (cattle+sheep) 212,279 cattle, 103,989 sheep	300,000	94.8%
Armenia	226,417 cattle	230,000	100%
Azerbaijan	428,873 cattle	400,000	93.3%

Tab. 2. Time schedule of vaccines distribution and use in Georgia, Armenia and Azerbaijan in autumn 2004

Country	Date of arrival in capital	release out of customs	Delivery to regions	proposed end of vaccination campaign
Georgia	11/10	16/10	early November	December
Armenia	10/10		following week	November
Azerbaijan	15/10	18/10	following week	mid November

The national vaccination campaigns were generally motivated by high concerns about the risk of FMD entry from neighboring countries (see 2.).

Vaccines used other than provided by FAO

Georgia:
No local FMD-vaccine was produced since the closing of the Georgian vaccine production plant "Biokombinat Grusgrobioprom" in early 2004 (see 3.). Local bi- and trivalent vaccine was last used in the spring campaign 2004 and is not planned to be used in the future. About 2,000 bottles of local bivalent vaccine were kept in the central vaccine store at the time of the mission. 1.2 million doses of FMD vaccine were received from Turkey in 2004. Of this stock, 500,000 doses of trivalent vaccine will be used in autumn 2004 for the border areas to Armenia and Azerbaijan and on animals that move to border summer pastures. A further 575,000 doses of bivalent Turkish vaccine will be used in other parts of Georgia.

Armenia:
Apart from the vaccine provided by FAO only local vaccine was used in Armenia:
- spring 2003: 618,494 doses bivalent AO vaccine, 513,008 doses Asia1 vaccine
- autumn 2003: 1,360,091 doses bivalent vaccine and 897,690 doses Asia1 vaccine
- spring 2004: 811,218 doses trivalent vaccine

It was not possible to break the figures down to livestock species at the time of the mission.

Azerbaijan:
Azerbaijan nearly exclusively vaccinated with ARRIAH vaccine. Three years ago several thousand doses of Turkish vaccine were used. In 2003 a total of 2.40 million cattle and 1.33 small ruminants were vaccinated.

Booster vaccination was generally not applied in Georgia. Armenia claimed to vaccinate calves three times in the first year. In Azerbaijan boostering was also carried out in calves. In both countries this was subject to availability of vaccine and budget.

Vaccination and livestock keeping

In all three countries the grazing of livestock, mainly sheep, on mountain summer pastures is practiced. These summer pastures are often located in the vaccination buffer zone. Approximately less than half of the sheep population of lowland areas is brought to summer pastures. Summer and winter pastures can be more than 200 km apart. Only few cattle are taken to these distant summer pastures. If summer pastures are nearby cattle are also grazed there.

These migration patterns were considered by veterinary authorities a high risk to spread FMD, if the disease is present. Because of movement of livestock to summer pastures, spring vaccination was considered more important than autumn vaccination. It was also recognized that vaccination of migrating stock has equal importance to the vaccination in border areas.

More attention was paid to the vaccination of sheep in the buffer zone of Georgia, where trivalent vaccine was used. In Armenia and Azerbaijan sheep were more frequently left without vaccination. If sheep were vaccinated this was done using bivalent AO (in Armenia and Azerbaijan) or Asia1 (Armenia) vaccine. For Armenia, information was not consistent whether sheep were vaccinated and which vaccine was used.

Vaccination of animals that migrate to summer pastures was carried out in spring before moving. Lambs in lowlands are born from around November/December and might therefore also be vaccinated with the flock. Vaccination is mostly done on the home farms.

It could not be fully established during the mission how and which vaccine was distributed and how the vaccination of these migrating herds in spring was organized.

The vaccination coverage in Georgia, Armenia and Azerbaijan for 2003 and 2004, calculated from official figures, is shown in Table 3. The table illustrates that generally more attention is paid to the vaccination of cattle vs. sheep and to spring vaccination vs. autumn vaccination. Vaccination coverage of cattle in the buffer zone ranged in spring campaigns 2003 and 2004 from 88.7 to 100%. In autumn 2003, no vaccinations were carried out in Azerbaijan, and vaccination cover was lower than in spring for Georgia and Armenia.

Tab. 3. Vaccination coverage in Georgia, Armenia and Azerbaijan (in %), 2003-2004

Country	area	Spring 2003		Autumn 2003		Spring 2004	
		LR	SR	LR	SR	LR	SR
Georgia	whole country	47.0	54.0	13.5	18.2	54.2	73.7
	buffer zone	101.6	35.9	24.0	0.	105.2	73.1
Armenia	whole country*	?	?	?	?	?	?
	buffer zone **	88.7	0	54.9	0	122.9	0
Azerbaijan	whole country	107.2	18.3	0	0	99.9	41.4
	booster vacc.***	51.3	0	0	0	1.5	0
	buffer zone	95.1	47.0	0	0	88.8	33.6
	booster vacc.***	59.4	0	0	0	5.5	0

LR-large ruminants, SR-small ruminants
livestock census was usually carried out at the beginning of the year and did not include most of the newborn stock, see Annex 4
buffer zone: FAO vaccine used in spring 2003 (and in autumn 2004 in Armenia)
* It was not possible to break down livestock species from the figures presented
**vaccination coverage could be higher than presented as also other vaccine was used for cattle and sheep (e.g. Shirak Region)
*** the young stock for booster vaccination was estimated at 20% of the total population

Cold chain

The maintenance of the cold chain to ensure optimal vaccine efficacy varied between the countries. Armenia had sufficient cooling capacities on all administrative levels. Georgia lacked cooling capacity on central, regional and village level. Alternatively, cellars and rented storage space was used on central and regional level. In Azerbaijan central storage was sufficient while on county and village level fridges were not always present or functioning. Power cuts frequently occurred in Georgia and Azerbaijan.

Some county veterinary centers and village veterinarians had cool boxes. Whether and how they were routinely used during vaccination could not be determined.

2. Gaps in vaccination cover

The last outbreaks of FMD were officially reported in Azerbaijan in 2001 and in Georgia and Armenia in 2002. No indication of outbreaks after these reports were found during the mission.

The highest risk of FMD entry into the country is considered by the veterinary authorities in Georgia and Armenia to be via Turkey and in Azerbaijan via Georgia.

The following points could contribute to gaps in the vaccination cover of the livestock population:

- sheep populations: not or only vaccinated once a year; no booster vaccination; most likely to come into contact with other animals across borders on mountainous summer pastures; frequently traded
- young cattle: mostly not sufficiently booster vaccinated; less immunity; more frequently traded than adult cattle
- irregular vaccination due to availability of vaccine and logistic constraints: e.g. the spring vaccination 2004 in parts of Georgia was finished in July, in the Adsharian AR in August. To maintain the vaccination interval of 6 months this has delayed autumn vaccination.
- quality of vaccine exposed to higher temperatures: storage without sufficient cold chain in Georgia and Azerbaijan possibly over one month, see Tab.1
- mixing of vaccinated and not sufficiently or unvaccinated animals:
  - as a result of international trade; trade of animals occurs mainly between Georgia and: Armenia, Azerbaijan, Turkey
  - as a result of national trade (local livestock markets, meat supply to the capital) and animal movements to pastures

As only direct border counties are included in the buffer zone, the distance from the border to areas not included in the buffer zone vaccination could be as low as 15 km (e.g. between Yerevan/Armenia and the Turkish border).

A possible geographical gap in vaccination coverage could exist in the border area to Iran south of Nogorny Karabakh. This land, sparsely populated by humans, is used as summer and winter pasture for livestock. It was not possible to visit Nogorny Karabakh during the mission. According to information received from veterinary authorities of Nogorny Karabakh, the livestock population in 2004 in this area was 60,000 cattle, 65,000 sheep and goats and 28,000 pigs. About half of this population is kept in the border counties to Iran. 30,000 doses of trivalent vaccine were sent for use in these border areas from Armenia in October 2004. In Autumn 20,000 doses were delivered to Nogorny Karabakh. There were 174 veterinarians working in government, the central laboratory and in 9 local veterinary stations.

In the Abkhasian AR (Autonomous Region) of Georgia veterinary structures seem to be very weak. This region is seen as high FMD risk area by Georgian veterinary authorities. The situation for the veterinary services of Adsharian AR of Georgia has improved. Since early 2004 this region is again under control of the central government. Abkhasia and Adsharia received no vaccines from the central government in autumn 2003, while in spring 2004 45,000 doses were delivered to Abkhasia and 137,558 doses to Adsharia. Although access

by the Georgian government to South Ossetia is also very limited, this area is of less concern as the border to Russia seems to pose a low FMD risk to Georgia.

3. Sero-surveillance studies

During the mission, sero-surveillance pilot studies on cattle have been designed by the consultant and asked to be carry out in Georgia and Azerbaijan:

- aimed at detecting at least 5% prevalence of NSP-positives on county/region level at 95% confidence level (sample size: 58 or 59 according to cattle figures)
- to assure the required number of samples for diagnosis the sample size in each county or region was increased to a total of 75 collected from 3 villages
- collection of data of individual animals and the vaccination and disease history
- the serum should be stored in the country capitals.

The results of this study could provide information about the antibody level of cattle before revaccination in risk areas and issues of NSP positives could be better explained. The study areas have been selected to allow comparison with the NSP results of 2003 (see Tab. 4)

Tab. 4. Pilot studies: study areas, sample sizes and NSP results in 2003

Contry	Region/county	Sample size	Prevalence of 3ABC antibodies (%) in 2003
Georgia	Adsharian AR	75	2
	Akhalkalaki	75	50
	Akhaltsikhe	75	12
	Adigeni	75	24
	Ninotsminda	75	57
	Total	375	
Azerbaijan	AR Nakhichevan	75	5
	Beiljagan	75	n.a.
	Imishli	75	8
	Dshalilabad	75	13
	Astara	75	0
	Total	375	

Armenia has started sero-surveillance according to the ARRIAH ELISA protocol in 2004. The testing of 4,033 cattle samples collected until October 2004 indicated an antibody level of 32.4% against serotype A, 34.6% against serotype O and 10.4% against serotype Asia1. The respective figures for the border regions are 42.7%, 40.7% and 15.4%. No information about the vaccination history of the sample animals was collected while data about the age existed but was not analyzed. NSP-testing was not carried out. This sero-surveillance is planned to be continued. If available, serum collected during this survey could be used for NSP testing in external laboratories. The adjustment of this sero-surveillance to more intensely study risk areas was not possible to implement due to time constraints during the mission.

Georgia and Azerbaijan lacked diagnostic facilities to carry out sero-surveillance at the time of the mission.

Further risk-based sero-surveillance plans for all three countries will be discussed at the surveillance workshop in December 2004.

4. Animal disease reporting systems

The animal disease reporting systems in Georgia, Armenia and Azerbaijan are paper based and organized strictly hierarchical. FMD reporting relies on passive surveillance by farmers and veterinarians. Most veterinarians and farmers in areas recently affected were aware of FMD and the symptoms. However, local knowledge and awareness of veterinarians and farmers might have ceased in areas where FMD has not occurred for many years. In Armenia active FMD sero-surveillance has started in 2004 (see 3.), the study design (objectives, sample size, sample selection) could not be discussed during this mission.

Animal identification systems are not in place neither do there seem reliable livestock figures available. The paper based reporting system does not allow fast linking of data and necessary analyses.

5. General remarks

The veterinary authorities of all three countries supported the mission of the consultant with great willingness and tried to meet all his demands.

Livestock numbers provided in the report (see also Annex 4) are official figures from the national livestock census. True figures are probably somewhat higher. Animals are usually counted at the beginning of the year and do therefore not include most of the newborn stock.

The veterinary services of all three countries suffer from very limited resources in all fields; especially lack of transport, veterinary equipment and consumables and a very low payment of veterinarians on all levels. For example, in all three countries village veterinarians receive from 20 to 35 USD and most veterinarians in central service from 30 to 70 USD. This situation could influence the motivation of the veterinary services and the quality disease surveillance and control.

Georgia has started a technical cooperation "Biosecurity Program" with the United States in 2004 for a duration of 7 years. As a result the biokombinat Grusgrobioprom was closed down as vaccine production unit. Three new laboratories will be established, in Tbilisi, Kutasi (Eastern Georgia), and Batumi (Western Georgia). Two of them will be finished in the first half of 2005. The new laboratories will include L2 and L3 facilities. Ten surveillance stations will be established in the country. These stations will include emergency response groups, facilities for rapid diagnostic testing and disease response. A new vaccine production unit at the Research Centre for Veterinary Diagnosis and Expertise is planned. This unit will first produce vaccines with imported antigens; later production with local antigens is envisaged. In Georgia some of the veterinary legislation is currently changing based on EU, OIE and World bank legislation and requirements. For instance, a law allowing fines of 500-1500 USD for refusing vaccination of national priority disease was passed in October 2004.

The Veterinary Services of Azerbaijan and Armenia are support by the EU Food Security Programme. This includes the future establishment of animal identification systems and diagnostic support and training.

Preliminary Conclusions

1. Vaccination was carried out in Georgia, Armenia and Azerbaijan in the buffer zone to Iran and Turkey apparently using the amount of vaccine doses provided by FAO/EC.
2. The currently practiced vaccination in the buffer zone and in large parts of the countries has contributed to no FMD outbreaks being reported in 2003 and 2004. Given the relatively ineffective passive surveillance in all three countries, the true occurrence of FMD remains unclear.
3. To safely move to a more risk-based vaccination and surveillance scheme, epidemiological expertise, diagnostic facilities, transparency and cooperation with neighbouring countries have to be vastly improved. The current passive surveillance must be improved and active surveillance implemented.

4. For the buffer zone vaccination programme clear objectives should be agreed upon between FAO/EC and the participating countries about mid- and long-term goals regarding vaccine use, FMD surveillance and control.
5. Closer cooperation between the three countries and with neighbouring Iran and Turkey regarding exchange of information and coordination of vaccination campaigns is recommended.
6. The results of the pilot studies should be used in the design of risk based sero-surveillance plans for the detection of disease and for follow-up of the issues of NSP positives.
7. FMD surveillance and control activities in these countries should be regularly assessed and coordinated. An international consultant could be employed for this purpose.
8. FAO should closely cooperate with the EU Food Security Programme and the US Biosecurity Programme in Georgia regarding FMD surveillance and control.
9. Electronic data recording and analysis should at least on central veterinary level be rapidly implemented to ensure timely availability of necessary data and information. The use of GIS should be established.
10. The extension of central storage facilities is essential in Georgia. Careful planning of the vaccination campaign in Georgia and Azerbaijan should ensure that the storage time of vaccines without proper cold chain is as short as possible. Alternative cooling facilities on county and village level should be actively sought in Georgia and Azerbaijan.
11. On livestock markets there is a high risk of spreading infection if FMD virus is present. However, the markets could allow closer veterinary inspection and be of high importance in disease surveillance. Therefore livestock markets should be put under veterinary inspection. Clinical examinations and certificates of origin and of destination of the animals should be minimum requirements.
12. As a result of the TCP (TCP/RER/3001 (A)) and the Biosecurity Program, Georgia could soon have modern disease surveillance and diagnostic capacities. Comparing the three countries, with its open borders and good trading relationships with neighbours, Georgia has probably the highest risk of getting infected and spreading FMD. It is recommended to make Georgia a regional focal point for FAO regarding FMD control and surveillance.

Annex 1 Itinerary

Date	Location	Details of activities
05-06/10/04	Berlin	Briefing by Dr Keith Sumption
11/10//04	Tbilisi, Georgia	Fly to Georgia
		Meeting with L. Ramishvili and G. Maglakelidze, Veterinary Dept. MoA (Ministry of Agriculture
12/10/04	Tbilisi, Georgia	Visit to the central vaccine store
		Discussions with L. Ramishvili and G. Maglakelidze, data collection, Veterinary Dept., MoA
		Meeting with Head of Agrarian Committee, Parliament of Georgia,
		Meeting with FAO National Coordinator
13/10/04	Tbilisi, Georgia	Research Centre for Veterinary Diagnosis and Expertise
		Discussions with L. Ramishvili and G. Maglakelidze, data collection, Veterinary Dept., MoA
14/10/04	Tbilisi, Georgia	Discussions with L. Ramishvili, I. Tkemaladze and G. Maglakelidze
15-16/10/04	Batumi, Adsharian AR	Fly to Batumi
		Meeting with the Regional Minister of Agriculture and Head and Deputy Head of Veterinary Services
		Visit to county and village veterinary stations and to the BIP Sarpi (Georgia-Turkey)
		Return by car
17/10/04	Samtskhe-Javakheti Region	Visit to a livestock market, to the immediate border zone Georgia-Turkey and to a village slaughterhouse
18/10/04	Tbilisi, Georgia	Discussions with L. Ramishvili and G. Maglakelidze on vaccine use, data collection, Veterinary Dept., MoA
19/10/04	Tbilisi, Georgia	Departure to Armenia by train
20/10/04	Yerevan, Armenia	Arrival in Yerevan
		Meeting with FAO Assistant Representative, EU Food Security Programme Representative and Head of State Veterinary Service
		Visit of the Central Vaccine Store
21/10/04	Aragazotn and Armavir Regions	Visit to county and village veterinary stations and to the immediate border zone Armenia-Turkey
22/10/04	Yerevan	Discussions with G. Bagyan and A. Anouchevan
	Ararat Region	Visit to county and village veterinary stations
24/10/04	Armavir Region	Visit to villages in Armavir Region, Discussions with UNDP staff Armenia and FAO Assistant Representative

25/10/04	Yerevan	Visit to the National Laboratory
		Discussions with Vet. Inspection about sero-surveillance results
		Final Meeting with G. Bagyan
	Tavush Region	Travel to Ichevan; Tavush Region
		Meeting with Regional Vet. Service and with representative of GTZ Food security regional cooperation and stability program - Veterinary revolving fund
26/10/04	Tavush Region, Armenia	Departure from Armenia by car
		Visit of BIP Sadakhlo, Discussion with Armenian and Georgian veterinary border inspection officers
	Tblisi, Georgia	Arrival in Tblisi
27/10/04	Tblisi, Georgia	Meeting with FAO National Coordinator and I. Tkemaladze and G. Maglakelidze (Veterinary Dept.)
	Baku, Azerbaijan	Fly to Baku, Meeting with Head of Epizootiological Sector
28/10/04	Baku, Azerbaijan	Visit of the Veterinary Department, the State Association of Veterinary Provision (Supply) and the Republic Veterinary Laboratory
29-31/10/04	Sabirabad, Imishli, Beiljagan, Biljasuvar, Dshalilabad and Masalli County	Meeting with county veterinary officers, village veterianrians and farmers
		Visit to Masalli livestock market
1/11/04	Baku, Azerbaijan	Discussions with R Safarov, G. Magerram and R. Hasan, data collection; Veterinary Dept.
		Final meeting with R Safarov
2/11/04	Agsu, Agdash, Goytshay, Agdafa and Gasakh County; Azerbaijan	Departure from Azerbaijan by car
		Visit to the county veterinary centres and BIP in Gasakh County
		Arrival in Tblisi
3/11/04	Tbilisi, Georgia	Meeting with I. Tkemaladze and G. Maglakelidze, data collection, Veterinary Dept. MoA
4/11/04	Tbilisi, Georgia	Discussions with I. Tkemaladze and G. Maglakelidze about the sero-surveillance study; Veterinary Dept. MoA
		Opening of the FAO Regional Office in Tbilisi
5/11/04	Tbilisi, Georgia	data collection and discussions about the sero-surveillance study, Final meeting with I. Tkemaladze and G. Maglakelidze Veterinary Dept. MoA
6/11/04	Tbilisi, Georgia	Fly to Germany

Annex 2 People met

FAO

Dr Keith Sumption	Secretary of the European Foot-and-Mouth Disease Commission, Animal Health Service

Georgia

Ministry of Agriculture

Dr Levan Ramishvili	Chief Veterinary Officer; Veterinary Department
Dr Irakli Tkemaladze	Deputy Chief Veterinary Officer; Veterinary Department
Dr Gambul Maglakelidze	Anti-Epidemiological Measures Administration, Head of Administration; Veterinary Department
Dr Gugashvili	Director of the Research Centre for Veterinary Diagnosis and Expertise
Dr Tengiz Beridze	Akhalsikhe District, Head of Veterinary Services
Dr Eduard Phutkaradze	Adsharian AR, Minister of Agriculture
Dr Vaja Iakobadze	Adsharian AR, Head of Veterinary Services
Dr Shalva Ananidze	Adsharian AR, Deputy head of Veterinary Services
Mr Mamuka Nasidze	Aspindza District, Slaughterhouse manager

Other

Mr Mamuka Meskhi	National Coordinator FAO, Georgia
Mr George Kheviashvili	Member of Parliament, Head of Agrarian Committee
Mr Shalva	Samtskhe-Javakheti Region, Regional Administration

Armenia

Ministry of Agriculture

Dr Grigori Bagyan	Head of State Veterinary Service
Dr Anouchevan Aghajanyan	Head of State Veterinary Inspection
Dr Tigran Gasparyan	Chief Veterinary Officer, State Veterinary Service
Mr Armen	Head of Veterinary Service, Ararat Region
Mr. Armen Manalchion	Head of veterinary border inspection, BIP Sadakhlo

Other

Mr Avetik Nersisyan	FAO Assistant Representative; Armenia
Mr Grigor Grigoryan	Representative of the EU Food Security Programme
Mr Tigran	GTZ Food security regional cooperation and stability program - Veterinary revolving fund

Azerbaijan

Ministry of Agriculture

Prof Ramiz Safarov	Chief Veterinary Officer, Head of State Veterinary Inspection
Dr Emin Shahbazov	Assistant of Chief Veterinary Officer
Dr Gadim Magerram	Head of Treatment and Eradication of Epizootic Diseases Sector (Epizootiological Sector)
Dr Rafiq Hasan	Epizootiological Sector, Field Servise
Dr Mahir Hajiyev	Director of the State Association of Veterinary Provision (Supply)
Dr Ismail Gasanov	Director of the Republic Veterinary Laboratory

Appendix 6

Updated FAO EUFMD RG ACTION PLAN 2003-2005 (January 2005)

Kris De Clercq

Assisted delivery for samples from third countries
Action: EUFMD secretariat (report, each Executive Committee Session)
Progress: Despite the relatively slow progress made in establishing agreements, the Group strongly recommended continuation of the efforts.

Vaccine selection: invite comments from vaccine manufacturers and organise workshop for regional reference laboratories, etc.
Action: David Paton: EU Coordinated Action accepted and started 1 Jan 2005.

Establish guidelines on post-vaccinal surveillance: Vaccine-to-live policy for Europe. Need for 'between herd' prevalence estimates.
Action: David Paton/ Kris De Clercq/ Aldo Dekker/ Matthias Greiner/ Secretariat/ Alf Füssel
Progress: PVS paper + Small herd paper

Laboratory sero-diagnostic capacity – guidelines (by April 2004)
Action: EUFMD secretariat
Progress: Position paper – WG Cordoba

Phase XVIII WRL report to RG session 2004 & plan for next phase
Action: David Paton/ Kris De Clercq/ Emiliana Brocchi/ Aldo Dekker
Progress: Phase XVIII reported/ Plan for Phase XIX proposed

Comparative evaluation of candidate DIVA tests
Action: Kris De Clercq/ E Brocchi/*Aldo Dekker*/ David Paton/ Hagai Yadin
Progress: Follow-up Brescia WS 11-13 Jan 2005 + Hong Kong project

Proficiency panel for virus detection methods (VI, antigen ELISA, RT-PCR)
Step 1: limited number of NRLs / report to RG session 2004
Review/plan Step 2 = distribution to all NRLs report to RG session 2005
Action: c/o David Paton /Kris De Clercq
Progress: Results to be discussed + report / step 2 to be planned and funded

Global FMD surveillance map/models
Plan: by end of December, 2003
Action: EUFMD/WRL/FAO/OIE working group

Evaluate pen-side tests and develop guidelines
Plan: pilot study on disease outbreak investigation
Action: Nilay Unal/ *Hagai Yadin*/Donal Sammin
Progress: Results study in Turkey to be reported

Working group on biosecurity (serodiagnostic)
Action: Secretariat
Progress: paper adopted

Working group on development of a diagnostic reagent bank) (by Cordoba, April 2004)
Action: Bernd Haas/Alf Füssel/Kris de Clercq
Progress: Diagnostic reagent banks for FMD paper/ discussion with companies + company proposals

Guidelines for sample transport (by Cordoba, April 2004)
Action: Vilmos Palfi/David Paton
Progress: WRL LCP to EUFMD/ Yearly update

WORKSHOP on contingency planning for NRLs (April 2004; Cordoba, Spain)
Action: with local organization by Secretariat/Kris De Clercq and attendance by all NRLs. Position papers must be prepared in advance by all working groups.
Progress: Completed. Follow-up?

Study to assess D-values and Z-values for heat treatment of milk and pork from FMD-infected animals.
Action: Soren Alexanderson to draft outline of project (by FAO Gen Session) with contribution from other members.
Progress: development of plan

In 2005 RG group to review vaccine antigens and gaps in sample submissions to reference laboratories (i.e. priority antigens and locations; two-year review).

Appendix 7

Report on the Session of the FAO EUFMD Research Group at Crete (Greece) 11 October 2004 (Closed Session)/12-15 October 2004 (Open Session)

Kris De Clercq

CLOSED SESSION: 11 October 2004

Item 1 - Adoption of the Agenda

Item 2 - Papers for adoption

2.1 Minimum requirements for FMD serology laboratories

A paper* describing the minimum requirements for FMD serology laboratories was adopted. The Member Countries should be informed of these requirements and a link should be made with the OIE ad hoc Group on laboratory biosecurity.

2.2 Diagnostic reagent bank

A position paper of the Group on the issue of establishment of a diagnostic reserve was adopted. This paper will be useful for tenders and contingency plans (EUFMD Member Countries, EC).

2.3 Sample transport

The paper "Summary of the Current Regulations on the Collection and transportation of specimens for vesicular virus investigation to the FAOWRL for FMD." shall be further reviewed to finalise the document and will be updated yearly or sooner if relevant changes occur.

The UN-SubCommittee of experts on transport of dangerous goods (UNSCETDG) approved an OIE proposal made in July 2004 (required final ratification in December 2004) enabling differentiation between lower risk diagnostic specimens and cultures of infectious agents. The entry into force of thse changes is not expected until 1st January 2007, and therefore OIE has approached the International Civil Aviation Organisation (ICAO) for an addendum to the 2005-2006 Technical Instructions to be published, which would if agreed, bring forward the implementation to 2005.

It is recommended that the national delegates on UNSCETDG and ICAO be requested to support the position of OIE.

Item 3 - Progress reports of the Working Groups

3.1 Assisted delivery of samples from third countries

Despite the relatively slow progress made in establishing agreements, the Group strongly recommended continuation of the efforts.

3.2 Vaccine selection for the European banks

3.2.1 Vaccine selection and related issues

The isolates received by the FAO WRL in the last year did not indicate a necessity for updating the antigens in the European vaccine banks.

The global function of the WRL and support given by international bodies should be included in the Agenda of the EUFMD General Session.

* All papers described can be consulted at the FAO EUFMD website under reports/Research Group/2004, Crete, Greece : http://www.fao.org/ag/againfo/commissions/en/eufmd/crete.html

3.2.2 Development of models to improve risk assessment/communication of FMDV circulation

Prediction of FMDV circulation may provide a basis for better risk visualisation, and would assist in identifying areas where the level of risk may be high but surveillance information low.

The Group should be involved in international collaborative projects on FMD risk mapping and global risk analysis tools should consider agro-terrorism. A liaison with EC (DG-Research) to identify the outcomes of NATO Sessions relating to prevention of agro-terrorism was considered essential.

3.3 Comparative evaluation of candidate DIVA tests

The results of the Workshop (WS) in Brescia were reported and discussed.

The WS has identified tests that perform very similarly to the OIE index test, for use in cattle. Provisional figures for test performance have been identified, but which will not be released until final quality checks have been completed.

Laboratories should be given sufficient information on which to base their own decisions concerning the use of a particular test. Guidance on strategies for test application and analysis would be helpful to state veterinary services.

Principal gaps were in the number of suitable sera available to be tested from sheep and pigs. A collaboration is established between the EUFMD/FAO WRL/Dr Dyrting from Hong Kong to obtain pig sera.

During a follow up of the WS it has been decided to try to submit data for publication on test performance and on post vaccination surveillance (PVS) by the end of March-April.

3.4 Working Group on post-vaccination surveillance

3.4.1 Progress on parameter estimations

An overview was provided of some recent developments relating to parameter estimation on a) performance of diagnostic tests, and b) on design prevalence.

It was stated that absence of infection/disease is technically impossible to prove, and therefore the target (detection limits) and the design level prevalence need to be defined.

The disadvantages and advantages of a move from the current surveillance objectives, to adopting the "absence of circulation" objective after emergency vaccination in normally unvaccinated populations, needs to be clearly set out.

The issue of low target prevalence is stumbling block to progress on defining acceptable levels of PVS, and therefore the EUFMD Commission should explore alternatives.

3.4.2 Post-vaccination serosurveillance (PVS) for presence of FMD infected animals

Several significant concerns on PVS were raised, one being that of testing small herds for absence of infection.

Meanwhile a working Group prepared a paper on the small herd problem.

Attention to the issues for FMD free countries in regaining FMD free status when emergency vaccination is applied must be urgently addressed.

A working group submitted a proposal for changes to the OIE Code and surveillance guidelines.

3.5 FAO Phase XVIII progress and plan

See report on the Open Session.

3.6 Proficiency panel for virus detection; progress report (pilot study)

The 'Progress and future prospects for standardisation of FMD tests' was presented, considering a clear split in activities for the development of reference sera and for proficiency testing. Proficiency panels for virus detection tests were sent out to 6 laboratories with the aim to analyse the data and the set-up. Later a more broad comparative exercise will be organised. Additional funding would be required for some transportation of the panels.

3.7 Working Group on penside tests

A rapid antigen and antibody detection test (chromatographic strip tests) were utilised in a study in Anatolia, Turkey. The antigen test used was found to have a low sensitivity, except with fluid

from intact vesicles but intact vesicles are not commonly found. The Rapid test for antibody detection has a low sensitivity (between 11 to 48%) compared to the laboratory ELISA methods (73-100%).
Interpretation of SP and NSP serology results may be difficult in endemic areas, particularly where vaccination is used. Guidance is needed on the interpretation of herd profiles.
Greater involvement of the RG in the surveillance activities in countries not free of FMD should be encouraged by the EUFMD Commission, which should provide a high level of mutual benefit.
The RG should assist in the analysis and interpretation of herd/village level serology data from eastern Turkey.

3.8 Laboratory contingency planning (LCP)

It was proposed to consider the revised LCP of the WRL as potential replacement of the model plan developed and discussed at Cordoba. Action.

3.9 Working Group on FMD Virus inactivation kinetics

A Working Group will develop a study plan, including definition of the level of infectivity in pork products.
The Executive Committee should consider if the RG should develop a draft Section for the OIE Code, on treatment of pork from areas not free of FMD, or other sections of the Code relating to conditions for trade in pigs/pig meat from areas not free of FMD.

3.10 Laboratory sero-diagnostic capacity

A paper on "adequate sero-diagnostic capacity" should be developed by the Working Group, in advance of the EUFMD General Session in 2005.

3.11 Bio-security standards for FMD laboratories

The need to revise the 1993 Standards was not clear as these had worked without recognized problem for at least 10 years, and any change would have financial implications for laboratories which may even lead to closure of facilities.

Item 4 - EUFMD/EC supported studies relating to validation of DIVA tests

4.1 Prevalence in vaccinated herds exposed to infection – report of study undertaken in Israel

It was highlighted that spread in well vaccinated herds may be minimal even where direct or indirect transmission from a clinical case within the herd occurs, and that in well vaccinated groups of animals on same management unit, a few animals may sero-convert without clinical signs being seen, indicating exposure and infection had occurred.
From the epidemiological investigations, it was concluded that:
- Sheep are high risk factor as source of infection for cattle herds.
- Feedlot fattening systems, particularly those with vaccination problems, are at high risk of developing clinical FMD.

The study found figures of within herd prevalence, of 0 to 5% in 6 groups in two vaccinated dairy herds with no clinical signs.

4.2 Collection of sera/specimens for validation of DIVA tests for detection of animals received from SAT virus infections

A study on samples taken in Zimbabwe provided useful data on the prevalence of SAT 1 and 2 virus carriers in cattle herds 1-5 months after FMDV infection.
Routine RT-PCR was equivalent to, and optimised RT-PCR more sensitive than, virus isolation.
Sensitivity estimates of NSPE for detection of FMDV carriers (75-90%) were very similar to those obtained with experimental sera during the NSPE workshop in Brescia in May 2004.
It would be useful to conduct similar exercises involving herds with a more certain vaccination status and following use of emergency vaccination in a previously disease-free region, and also in areas where disease has occurred in vaccinated pigs and sheep.
As foreseen in the LOA the sera must be available to RG members participating in the comparative evaluation of DIVA tests and data must be presented to EUFMD.

Item 5 - Items arising from the Executive Committee 69th and 70th Sessions

5.1 Performance of the new oil adjuvanted vaccine and conventional vaccines produced by the SAP Institute in 2004

Responsibility for vaccine control has still not been transferred to Bornova Insitute.

Conventional, aqueous vaccines (Al-sap) vaccines continue to be the principal type produced and applied in the field. Oil vaccine was produced allowing some regional use within Turkey, and also export to Georgia.

Vaccine potency conducted in 2004 in naive cattle in field locations. For Asia-1, O and A types, the % with protective titres was 93-100%, 90-98% and 87-98% immunity.

The detailed potency test results (laboratory challenge and full results of field serological tests) should be made available to the Commission, until the time that recommendations of the 2003 mission have been seen to be implemented satisfactorily.

5.2 Guidelines for monitoring performance of FMD vaccines and vaccination in the field

This item was discussed using examples from the Thrace region, the Trans-Caucasus and Israel.

It was concluded that sero-monitoring vaccination in the field provides a useful measure of application of vaccines, but in addition vaccine potency must be monitored by challenge tests or by serological tests where a well established relationship has been described.

The necessity of obtaining panels of reference post-vaccination sera for each strain which is present in the vaccine bank was emphasised in order to ensure that titres recorded for a vaccine batch can be compared to titres of homologous reference batches.

The RG should finalise, as soon as possible, the sections relating to testing of the vaccine after arrival and in the monitoring of campaigns. The revision of the draft paper should be scrutinised by the Group before a decision to adopt it is made.

5.3 Terms of reference/vision for the Research Group of the Standing Technical Committee

The Terms of Reference were unanimously upheld.

Concern was expressed that the Committee maintained sufficient expertise and activities relating to control of the disease to ensure continuation of support to decision makers.

Item 6 - Items arising from EUFMD implemented actions in FMD Control in TransCaucasus under EC support

6.1 Plan for assessment of potency, and induction of NSP antibodies by FMD vaccines produced in Armenia and Georgia

Testing of FMD vaccines for induction of antibodies to NSP antigens should follow the protocol given in the position paper of the European Medicines Agency (EMEA) of June 2004 on requirements for vaccines against FMD.

Item 7 - Items raised by the Committee members

National responses to new Directive: expert groups/simulation exercises

The RG advices the Executive Committee to address the issue of expertise and competence of the national expert Groups, including the use of international experts, and therefore is recommended as an Agenda item for the 2005 General Session.

Item 8 - Upcoming issues and items for consideration in new workplan

The discussion on the new workplan (ie October 2005 - onwards) was deferred for discussion at a later time, ahead of the EUFMD General Session.

Item 9 - Workplan of the EUFMD Research Group to mid-2005

The Session agreed that the 2004 plan should continue into the second year, as envisaged at Gerzensee, with incorporation of the recommendations of the current Session.

Item 10 - EUFMD Research Group Sessions in 2005 and 2006
The locations and provisional dates of the 2005 and 2006 Sessions are:
Insel Riems, Germany; Dates: 20-23 September 2005
Eilat, Israel; Dates: 17-20 October 2006 (H Yadin to confirm dates)

OPEN SESSION: 12-15 October 2004

Item 1 – Recent findings in molecular epidemiology of FMDV
1. FMDV is still active in many parts of the world and there are significant gaps in our knowledge of the global diversity of the virus, of the likelihood for different viruses to spread and on standardised antigenic information to aid vaccine selection (SAT 2 is of the most concern due to its high degree of antigenic diversity).
2. A better coordination between reference laboratories will improve the global surveillance of FMD.
3. Recent reports of serotype C and SAT3 outbreaks are cause for some concern and the origin of these outbreaks is not yet clarified.
4. More linkages between antigenic and genetic comparisons are needed to improve our ability to predict vaccine coverage.
5. The laboratory and techniques used for confirmation of an outbreak should be recorded in the information system of the OIE (Handistatus II).
6. Information on genetic diversity of FMD viruses should be linked to more studies of the epidemiology of the infection in endemic regions to improve predictions on the risk of the spread of FMD viruses.

Item 2 - Surveillance: for what purpose and how much is enough?
1. Methods to validate, summarize, visualize and distribute global FMD surveillance information should be further developed and refined.
2. Cooperation among national and international bodies on global FMD control and surveillance activities is essential.
3. The GISVET system facilitates national surveillance of transboundary animal diseases (TADs) in Iran, and should assist understanding of spatial and temporal trends in FMD in this country, which may provide insights for wider application.
4. The Executive Committee should consider the proposals from EFSA and the UCDavis-FMD Surveillance and Modelling Laboratory about cooperation or partnership in the proposed joint FMD activities.
5. Sub-national data on livestock density, animal movements, people movements and product movements should be improved.
6. The role of small ruminants and domestic buffalo and wildlife species in the persistence of FMDV in domestic populations should be better addressed.

Item 3 - Transmission and its control
1. The number of infectious animals could influence the speed and intensity of the infection in contact pigs and sheep.
2. Current airborne spread models, although very well validated for spread over long distances, are far less accurate in predicting airborne spread over short distances.
3. Increasing the antigen payload in the vaccine might reduce the local replication and therefore the development of carrier animals.
4. Several vaccination strategies before infection significantly reduced transmission of foot-and-mouth disease virus in co-mingledcalves and pigs.

5. More studies should be done using varying conditions (housing, species etc.) and different strains of virus to provide a better understanding of the epidemiology of FMD and of parameters for modelling.
6. More attention is needed to identify factors that accurately predict between herd transmission.

Item 4 - Managing diagnostic demands
1. Australia learned from its simulation exercises that Lab Contingency plans should be constantly reviewed, tested and updated and that NCPs should include guidance to the lab on the capacity to be established for the situation in post-outbreak surveillance.
2. For detecting FMDV in milk, RT-PCR matched closely the results of virus isolation but no positive results could be obtained by PCR or VI in milk before the onset of clinical signs. The primers and probes used have to be monitored very closely.
3. The development is encouraged of improved analytical, quantitative and statistical methods to evaluate distribution of laboratory readings from various groups of animals as an alternative to the determination of optimal cut off values for tests.

Item 5 - Pathobiology & Diagnostics
1. Further studies on mathematical models of early FMDV infection are required to demonstrate the validity of the model.
2. The selective binding of FMDV by integrins could be used in rapid "penside" tests for virus detection.

Item 6 – Sero-diagnosis – improvements and standardisation
1. The Phase XVIII comparative testing exercise revealed an overall, high level of consistency in results between laboratories for both reference sera and proficiency panel using both NSP and SP tests.
2. Antigenic variability of type A strains can affect sensitivity of "structural protein" tests that use "heterologous" virus/antigens.
3. Control charts are an essential part of internal quality control and for maintenance of quality accreditation and the mutual recognition of results.
4. An annual round of inter-laboratory proficiency testing is essential for quality accreditation. This should be the core activity of future Phase exercises. An improved proficiency panel is needed for NSPE.
5. The issue of establishing reference sera should be separated from that of proficiency testing and further steps are urgently needed to realise the objective of their production.
6. The purpose and use of reference sera in FMD serodiagnosis needs to be clarified and the development and distribution of reference sera could be simplified by distribution of strong positive and negative sera only.
7. More work needs to be done on the development and validation of tests for the detection of antibodies to SAT serotypes.
8. Different cut-offs need to be identified for the SPCE tests taking account of the purpose of testing as well as the specificity and the sensitivity of the tests.

Item 7 – Optimisation of conventional vaccines
1. Serology could be one of the methods used in vaccine batch release testing. Laboratories and producers are encouraged to make their data and sera available to groups working on correlations between serology and protection. However, tests have to be calibrated to make data from different laboratories comparable.
The correlation between group mean LPBE titers and PD50 values may be strain dependant.
2. The added saponin to double oil emulsion vaccine based on Montanide ISA 206 enhanced significantly the immune response in pigs and cattle.

Item 8 – Regulatory issues affecting FMD vaccine selection and use

1. Following the recent review of EU pharmaceutical legislation, there is currently an opportunity to amend the annexes to directive 2001/82/EC to make specific provision for the unique requirements of FMD vaccines. The Commission was encouraged to make use of this opportunity to promote the authorisation of FMD vaccines in the interests of animal health and consumer protection.
2. Existing vaccine strains of serotypes O, C and Asia 1 generally provide a sufficient spectrum of antigenic coverage that the possible development of new vaccine strains is rarely necessary. In contrast, new variants of type A repeatedly emerge requiring constant surveillance and the possible development of appropriate, new vaccine strains.
3. In the discussion that followed an aspiration was expressed that a system of surveillance, and selection and distribution of vaccine strains, would be set up for FMD that would operate in a similar way to the network of WHO human influenza reference laboratories.

Item 9 – Novel vaccines

Presentations were made on the development of novel FMD vaccines based on: the innate immune defence and improved adjuvants to induce mucosal immunity; a synthetic peptide; a adenovirus- vectored FMD empty capsid and interferon-alpha; DNA vaccination involving a protein antigen boost; DNA vaccines based on FMDV minigenes; cytokine and Tolllike receptor mRNAs in the nasal-associated lymphoid tissues.

Item 10 - International Issues

The meeting was informed of the new criteria for OIE listed diseases and notification, the procedures for validation and certification of diagnostic assays, the changes in Chapter 2.2.10 on FMD introducing the concept of virus circulation, and the actions implemented by the OIE on the United Nations Sub Committee of Experts on the Transport of Diagnosis Goods (UNSCETDG).

Item 11 - Persistent and subclinical infections – Diagnostic and surveillance issues

1. A paper was presented stating that based on historical data, the risk of transmission of FMDV from carriers after emergency vaccination is smaller than the risk of introduction of FMDV by illegally imported meat. Further it was suggested that the risk of transmission of FMDV from carriers might be of the same magnitude as the risk of import of meat from animal populations in countries using vaccination against FMD.
2. Based on the comparative validation of 6 NSP tests it was concluded that samples from naive animals that scored false positive in one NSP tests often scored correctly in the other NSP tests and this may provide a basis for use of confirmatory tests to increase specificity.
3. Batch-to-batch testing is necessary when using diagnostic kits to ensure consistency of results; this could be organised internationally.

Item 12 – Test development and standardisation

1. Fitness for purpose should be considered when selecting a test for NSP antibody detection.
2. There is a need of confirmatory tests, with equal or better sensitivity and specificity as screening tests. Additional assays to differentiate infection from vaccination such as a multiplex luminex-based assay, IgA and gamma interferon assays are being developed, which have potential for use as confirmatory tests.
3. Panels of sera should be evaluated to validate new NSP tests, and provision should be made by FAO or other international organizations to support laboratories preparing these panels.

Item 13 - Surveillance using DIVA tests

Six papers were presented in which the field application of NSP antibody tests was described: a fieldstudy in Zimbabwe, Israel, Bulgaria, Turkey, Greece and South-America. The latter also described the isolation of FMDV type C from Brazil.

1. The ability of NSP tests to detect FMDV infection in vaccinated cattle under field conditions allows prevalence rates in vaccinated populations to be estimated.
2. NSP tests can be used in the serodiagnosis of SAT 1 and SAT 2-type FMD infections, such that they can be considered as serotype-independent serodiagnostic tests.
3. Age stratification should be used as part of the assessment of potential virus circulation in a population following FMD outbreaks or in the determination of the absence of virus circulation.
4. Follow-up epidemiological investigations and additional laboratory tests are indicated where NSP seropositive animals are identified.
5. Sampling strategies, which require the use of validated tests, should be developed that would assist countries in regaining the disease free status after an FMD outbreak and where vaccination has been used.
6. NSP serosurveillance (and follow-up investigation) should be conducted at least on an annual basis in the Thrace region of Turkey and in neighbouring regions of Greece and Bulgaria.
7. Careful consideration should be given to the statistical validity of the sampling regime for the surveillance purpose intended and to subsequent interpretation of the data.

Item 14 - Regulatory compliance

Serosurveillance strategies that could be used by European countries adopting a vaccinate-to-live policy for controlling future FMD outbreaks were discussed.

1. Uncertainty remains over: (i) the level of certainty with which freedom from infection must be demonstrated; (ii) how to interpret results from herd-based tests when herds comprise small numbers of animals and (iii) details of how to resolve test specificity problems by retesting and resampling.
2. LCPs should include decision trees to indicate the follow-up tests to be conducted and should make quantitative estimates of follow-up testing.

Item 15 - Managing the decision making process in control of FMD and in the priority setting of research and development

1. Recent developments in information systems are relevant to the decision making in risk management process, and to communication of risk management and scientific opinions.
2. Stakeholders could provide a positive contribution to the priority setting process of researchable questions on FMD prevention, surveillance and control.
3. The EUFMD Commission should develop a working group to identify user requirements for information management and options for information management and to address the options for improving knowledge transfer and training of national experts on FMD control, to meet current and future anticipated demand for FMD expertise.
4. The role of the EUFMD Research Group be further considered and developed to help meet the needs of the European member states for a range of competences in their national FMD expert groups.

Appendix 8

Draft Action List deduced from the Closed Session, 11 October 2004 Crete, Greece

Nr	Action	Responsible	Deadline
1	Min Requirements Sero-labs		
	- Inform Member Countries	Secretariat	< Gen Session FAO
	- Liaison with OIE	Secretariat	< Gen Session OIE
2	Diagnostic Reagent Bank	Bernd Haas	< RG meeting Riems
3	Sample transport		
	- Review current paper	David Paton	< Gen Session OIE
	- Yearly update	Vilmos Palfi	< RG meetings
	- Support OIE action	Secretariat	< Gen Session OIE
4	Discussion role FAO WRL	Secretariat	at Gen Session FAO
5	FMD risk mapping: Int. Projects	Prof. Willeberg David Paton Secretariat	< RG meeting Riems
6	Global risk analysis tools: Liaison EU DG Research & NATO	José Sanchez-Viscaino	< RG meeting Riems
7	Finalise comparison NSP tests	Kris De Clercq	< Gen Session FAO
8	Collaboration with Dr K. Dyrting	Donal Sammin David Paton Kris De Clercq	< Gen Session FAO
9	Finalise Guidelines on PVS	David Paton Kris De Clercq	< Gen Session FAO
10	Defining acceptable levels for PVS	Cordoba Working Group	< Gen Session FAO
11	Working Group on small herds	Matthias Greiner Aldo Dekker	January 2005
12	Comments on OIE Chapter 3.8.7	Secretariat David Paton Matthias Greiner	January 2005
13	Follow-up Phase XVIII	David Paton, Kris De Clercq Emi Brocchi, Aldo Dekker Bernd Haas	< end 2004
14	Phase XIX	David Paton	March 2005
15	Proficiency test virus detection/funding	David Paton/Secretariat	May 2005
16	Involvement in Surveillance Endemic Areas	Secretariat, Donal Sammin Kris De Clercq, Nacy Bullut David Paton	< Gen Session FAO
17	Analysis and interpretation of village level data (Turkey)	Donal Sammin, David Paton Kris De Clercq, Nacy Bullut	< end 2004
18	LCP of WRL to EUFMD Secretariat	David Paton	< Gen Session FAO
19	Study plan infectivity pork products	Soren Alexanderson	< Gen Session FAO
20	Adequate seo-diagnotic capacity paper	Cordoba Working Group	< Gen Session FAO
21	Finalised report on Zimbabwe study	Donal Sammin, David Paton	< Gen Session FAO
22	Discussion on SAP potency test	Nilay Unnal	< Gen Session FAO
23	Guidelines monitoring vaccine performance (+ field evaluation)	Hagai Yadin	< Gen Session FAO
24	Working group Information Management	Secretariat/Kris De Clercq	Exec.Com Jan 2005
25	Workplan / Action list	Kris De Clercq, Secretariat	Exec.Com Jan 2005
26	Research Group meeting 2005	Bernd Haas	< Gen Session FAO
27	Research Group meeting 2006	Hagai Yadin	At RG meeting 2005

Appendix 9

Considerations of the Standing Technical Committee of the EUFMD Commission

Articles of the OIE Code relating to surveillance in animal populations where disease freedom without vaccination is sought, following application of a "vaccination to live" policy in countries previously free of FMD without vaccination

December 2004

The Committee met in Session on the 11-15th October, and under Item 3 of the Agenda of the Closed Session, discussed the issues for countries wishing to regain the status of FMD free without vaccination, in fulfilling the relevant texts of the OIE Terrestrial Animal Code (Code as adopted in May 2004), and the surveillance requirements under the EU Directive 2003/85/EC. One paper (Paton, de Clercq and Dekker, 2004) presented for discussion concerned the technical problems with compliance with surveillance requirements under "emergency vaccination" scenarios, where "vaccination to live "is adopted. A subsequent paper (Greiner, 2004) provided an approach to address some of these concerns.

The working group was asked to prepare a summary of the technical concerns, and to identify possible revisions to the OIE Code (with emphasis on the Chapter 3.8.7) that could address the concerns, and to forward these to the OIE.

The Committee considers:

1. That it is scientifically inaccurate and in practical terms, not possible, to "demonstrate the absence of infection" as required under Article 2.2.10.7, para 1c.
2. "Absence of infection" is an absolute term, and thus demonstration of this creates an insurmountable problem for countries in designing surveillance programs which therefore acts to constrain the implementation of "vaccination to live" as an emergency measure.
3. That solutions may be found in terminology used in the Code, and/or in the associated Guidelines, which will retain the objectives underlying the Code articles.
4. That several issues (Annex 1) must be addressed in the Appendix 3.8.7, in the Guidelines, and particularly Article 3.8.7.3, and/or 3.8.7.5, as adopted in May 2004, to address concerns on:
    a. the lack of guidance in 3.8.7.for countries using vaccination to live as an emergency measure, within the framework of a stamping-out policy for clinically affected and in-contact susceptible animals
    b. the fate of animals on holdings where one or more animals give positive results in serological surveillance
    c. demonstration of absence of infection in small herds
    d. the appropriate level of design prevalences for surveillance in vaccinated populations
    e. the sequence of events in the follow-up investigation of herds giving positive results, including investigations in herds exposed to similar risks (backwards tracing from positive herds) , or at risk (forward tracing) from such positive herds.

The Working Group of the Committee therefore requests the OIE to consider:

1. **Replacing "demonstrates" with "indicates" in Article 2.2.10.7, 1 c.** *Suggested new wording indicated below (Annex 2). A possible definition of "absence of infection" is also suggested.*
2. **Making special reference in Appendix 3.8.7 to the situation of countries using the strategy of emergency vaccination and subsequently seeking to regain freedom from FMD.** *Suggested new wording indicated below (Annex 3), for section 3.8.7.5 and a subsection of 3.8.7.6.*

Annex 1.

With reference in Appendix 3.8.7 to the situation of countries using the strategy of emergency vaccination and subsequently seeking to regain freedom from FMD.

The concerns of the Committee include:

a. The necessity to give guidance on the fate of animals on holdings where one or more animals give positive tests results in post-vaccination, post-outbreak surveillance

Neither the FMD Chapter (2.2.10), nor the Appendix 3.8.7 of the Code indicate what is expected of countries following identification of animals which have confirmed positive status on serology for antibodies to NSP antigens. The absence of guidance may lead to situations where countries apply the test procedures indicated in the flowchart (3.8.7, Figure 1) but do not take measures following the confirmation that provides confidence that the epidemiological links relating to the sero-conversion are understood, and the identified risks contained.

It may be argued that for a country to "demonstrate the absence of infection" (as required under 2.2.10.7) will, *de facto*, require countries wishing to regain DFS without vaccination to slaughter animals which are confirmed to test positive. Such countries may decide to go further (it is required under EU Directive) to slaughter the susceptible population in-contact (herd-mates).

Further, it is important that the Veterinary Services undertake, and provide evidence for having undertaken epidemiological investigations to indicate if infection had entered holdings where there is an epidemiological link to the positive herd.

b. the demonstration of absence of infection in small herds

Small herds present a particular problem in that testing all individuals may not allow a demonstration that infection is absent because of the lack of sensitivity of the diagnostic procedure. This problem applies both to vaccinated and non-vaccinated animals, but the reliance on serological demonstration of status and the slightly lower sensitivity of NSP antibody assays creates a greater issue for application of a vaccination to live policy. Solutions to this problem were discussed in the Committee, and a paper outlining the problem, and a potential solution were developed.

Therefore the Committee suggests that:

f. the appropriate design of surveillance in populations where emergency vaccination has been applied to control outbreaks in non-vaccinating, FMD free countries

The impossibility of demonstrating absence of infection, with imperfect tests, has been previously mentioned. The proposal to modify from "demonstrate" to "indicate" absence of infection, enables the approach of surveillance in vaccinated populations to be harmonised with that of non-vaccinated populations following an outbreak, in that the objective to demonstrate with confidence that infection, if present is below a level that is considered a "risk" (design prevalence) .

Article 3.8.7.3 suggests the typical random sampling strategy would be one that provides 95% probability of detecting evidence of FMD or FMDV infection if it were present in 1% of the primary sampling units, and within herd prevalence of 5-20% in the NON-vaccinating countries or zones.

Until valid data prove otherwise the same design should be used after emergency vaccination. If infection is present in herds, the chance of infecting only 1 or 2 animals is very small. Small outbreaks often involve more individuals.

The appropriate animal-level design prevalence for use in design of surveillance after emergency vaccination with high potency vaccines, is questionable. Figures of 0.1% or 1% have been suggested, which would lead to the requirement for almost all vaccinated animals to be tested and given a sensitivity of less than 100% in diagnostic tests, would lead, particularly in small herds, to situations where the confidence in absence was less than 95% at herd or population level. Since the within herd prevalence in vaccinated herds exposed to infection will depend on a number of risk factors that affect the severity and duration of the virus challenge and the likelihood of sero-conversion in exposed animals (including level of immunity), the use of a single figure for design prevalence will be problematic.

The Committee considers that these concerns should be addressed in the texts of Appendix 3.8.7.

This may include the adoption of new or revised texts in Appendix 3..8.7.

Annex 2.

Terrestrial Animal Health Code, 2004, Article 2.2.10.7, 1 c.

Suggested new wording indicated below.

c. 6 months after the last *case* or the last vaccination (according to the event that occurs the latest), where a *stamping-out policy*, emergency vaccination not followed by the slaughtering of all vaccinated animals, and serological surveillance are applied in accordance with Appendix 3.8.7., provided that a serological survey based on the detection of antibodies to nonstructural proteins of FMDV indicates [demonstrates] the absence of infection in the remaining vaccinated population.

In writing this, it is recognised that the term "demonstrates" is found only 3 times in the entire FMD Chapter, ALL WITHIN Article 2.2.10.7 of the FMD Chapter. Therefore the use of the term should have limited effect on consistency[1].

Alternatively, other modifier terms could be used to qualify the term "absence of infection".

Alternatively, or further, the addition of a definition in the *General Definitions*, Chapter 1.1.1. The following wording may be considered:

Article 1.1.1.1.

For the purposes of this *Terrestrial Code*:

Absence of infection

in the context of animal populations, means that infection is not able to be detected by the application of an effective *surveillance* system, operated according to the relevant articles of the *Terrestrial Code;* absence of infection in a population cannot be completely proven but may be expressed in terms of levels of confidence, gained through surveillance activities

[1] potentially, the other references might be changed, e.g the use of demonstrates in 2a and 2b, applied to the absence of virus circulation; these were not considered by the Committee, which was principally addressing concerns of countries free without vaccination)

Annex 3 Proposed wording for Chapter 3.8.6, Articles 3.8.7.5 and 3.8.7.6,

Based on the version of Chapter 3.8.7. (as circulated by OIE to member countries for comments in November 2004)

Wording proposed for possible inclusion in Article 3.8.7.5:

Countries or zones re-applying for freedom from FMD without vaccination, where the strategy of vaccination has been used as an emergency measure

The OIE recognizes the strategy of *slaughter of all clinically affected and in-contact susceptible animals and vaccination of at-risk animals, without subsequent slaughter of vaccinated animals,* may be adopted by countries with the objective of eradicating infection following an outbreak.

In addition to the general conditions, a country re-applying for freedom from FMD without vaccination should show evidence of an active surveillance programme for FMD as well as absence of FMDV infection. This will require serological surveillance incorporating tests able to detect antibodies to NSPs as described in the *Terrestrial Manual*.

The time periods before which an application can be made for re-instatement of freedom from FMD depends is indicated in Article 2.2.10.7. of this *Terrestrial Code*.

A Member Country re-applying for freedom from FMD without vaccination in a country or zone where vaccination is used as an emergency measure within the framework of a stamping out policy, should report the results of an active surveillance programme in which the FMD susceptible population undergoes regular clinical examination or where active surveillance has targeted a statistically significant sample of the susceptible population.
In addition, a statistically significant sample, based on the susceptible population at risk during the *outbreak*, would need to be tested for absence of FMDV infection. In particular circumstances, targeted surveillance could be used to accomplish the task.

As indicated in Article 2.2.10.7. of this *Terrestrial Code*, member countries should provide documented evidence that indicates [under study; "demonstrates" in the current Code] the absence of infection in the vaccinated population.

The member country should provide documentation that supports the design of the serological surveillance program.
Where several rounds of serological sampling are involved, the member country should document how results of preliminary rounds have been used to design and implement the subsequent rounds of serology and other investigations. It should also document how the risk of infection in the population has been contained during the period between the last vaccination or last case, whichever occurs latest, and the conclusion of the sero-surveillance. The member country should document the measures taken to contain risk of infection in herds where one or more animals gives a positive test result.

A sequential approach may be followed, in the period after the last case of FMD and after last vaccination, involving;

a. starting from 30 days after the last case or last vaccination, screening of large herds (defined below) in the vaccination zone for detection of infected animals, using a between herd prevalence of 5% and a within herd prevalence of 2-5%. For small herds (defined below), screening should also be conducted, applying special considerations as indicated below.
b. for herds with confirmed positives, whole herd testing to assess the validity of the chosen level of within-herd prevalence; if these herds are numerous this study could be stratified according to risk factors, such as distance from the putative source of infection
c. according to findings in c., modification of the design prevalences and subsequent further round of sampling may be required;

d. follow up investigations conducted on each herd with positive animals, in a timely manner: identification of in-contact herds to those containing confirmed positive animals, and testing (or re-testing) of in-contact herds using a more sensitive procedure (as indicated in a)
e. continuation of the rounds of serological surveillance until sufficient evidence is gained for absence of infection (with 95% confidence that sampling scheme could detect infection if present at or above the minimum design prevalences specified)
f. the above is based on the following
    i. that strict movement controls will continue on all herds in this zone to contain any possible spread, until the evidence for absence in the surveillance zone is gained
    ii. the Veterinary services will contain the risk from herds in which confirmed positive animals are found, by slaughter of the herd.

Special considerations for small herds

g. a small herd is defined on the basis of formulae which take into consideration design prevalence and test sensitivity (Greiner, 2004). For tests with diagnostic sensitivity of 80%, a small herd is defined as having an animal population less than the integer equal or greater than (log(1 - C)/log(1 - Se))2/ divided by the within herd design prevalence (40 animals for a 5% prevalence and 95% confidence and 80% sensitivity, 100 for a 2% prevalence and 95% confidence and 80% sensitivity) .If the test sensitivity is higher than 95% only one positive sample per herd is required
h. The sample size of small herds should be sufficient to provide statistical evidence for freedom from infection at a confidence level (as stated elsewhere) for the subpopulation of small herds, given a design prevalence between herds and within herds (as stated elsewhere).
i. Where there is a plausible epidemiological connection, such grazing together of animals with different owners, or grazing on either side of a shared boundary such that aerosol or contact transmission could readily occur, or other epidemiological connection, small herds may be considered part of a larger group for sampling and statistical purposes.

Proposed revision of wording – Section 3.8.7.6

Underlined indicates insertions; [indicates deleted text]

The diagnostic sensitivity of the confirmatory test should equal or exceed that [approach] that of the screening test. The EITB or another OIE-accepted test should be used for confirmation. In exceptional circumstances a lower sensitivity (within 10% of the screening test) is permissible, but discouraged since the credibility is reduced of the negative results so obtained

The follow up procedure in case of positive test results [if no vaccination is used] in order to establish or re-establish FMD free status without vaccination

Where vaccination has NOT been used in the control programme:
Any positive test result (regardless of whether SP or NSP tests were used) should be followed up immediately using appropriate clinical, epidemiological, serological and where possible virological investigations of the reactor animal at hand, of susceptible animals of the same epidemiological unit and of susceptible animals that have been in contact or otherwise epidemiologically associated with the reactor animal. If the follow up investigations provide no evidence for FMDV infection, the reactor animal shall be classified as FMD negative. In all other cases, including the absence of such follow up investigations, the reactor animal should be classified as FMD positive.

Where vaccination has been used in the control programme:
Any positive test result (NSP tests) should be followed up immediately using appropriate clinical, epidemiological, serological and where possible virological investigations of the reactor animal at hand, of susceptible animals of the same epidemiological unit and of susceptible animals that have been in contact or otherwise epidemiologically associated with the reactor animal. If the

follow up investigations provide no evidence for FMDV infection, the reactor animal shall be classified as FMD negative. In all other cases, including the absence of such follow up investigations, the reactor animal should be classified as FMD positive.

References

D J Paton[1], K de Clercq[2], A Dekker 2004. Post-vaccinal serosurveillance for FMD: a European perspective on progress and problems. Appendix 8, *Report of the Session of the Research Group of the Standing Technical Committee of the European Commission for the Control of Foot-and-Mouth Disease, Chania, Greece, 11-15th October 2004.*

Matthias Greiner, 2004. On the issue of documenting small herds as free from disease.. Appendix 9, *Report of the Session of the Research Group of the Standing Technical Committee of the European Commission for the Control of Foot-and-Mouth Disease, Chania, Greece, 11-15th October 2004*

Appendix 10

Summary report from IAH-Pirbright to the OIE Scientific Commission on Animal Diseases on Foot-and-mouth disease virus (FMDV) isolations and characterisations during 2004 for insights into the global FMD situation

FAO World Reference Laboratory for FMD, OIE Reference Laboratory for FMD
Pirbright Laboratory, Institute for Animal Health, Ash Road, Woking, Surrey GU24 0HF, UK

1. FMD outbreaks reported in 2004

In 2004, no foot-and-mouth (FMD) outbreaks were officially reported in FMD-free countries that did not practice vaccination. However, outbreaks occurred in a surveillance zone around a FMD-Free zone (South Africa) and in regions where FMD has not recently been shown to circulate (Russia, Mongolia, Peru, Brazil and Colombia). Many of these outbreaks have been brought under control. Other reported outbreaks have involved countries in the Middle East, Asia, Africa and South America, all in areas where FMD was already endemic. In total, FMD outbreaks occurred in 48 countries during 2004 (OIE website and clinical samples received at WRL/FMD, TABLE 1). Serotypes O, A, C, SAT 1, SAT 2, SAT 3 and Asia 1 were reported at least once by 29, 11, 2, 6, 9, 1 and 4 countries, respectively; whereas FMDV involved in outbreaks in twelve countries were never characterised. The presence of two or more different serotypes was observed in 17 countries. Serotypes SAT 1, SAT 2 and SAT 3 remained localised in Africa and serotype Asia 1 in Asia. As well as the official reports from Kenya and Brazil, there were also unconfirmed reports that serotype C FMDV was detected in Pakistan and Ethiopia. Although the occurrence (but not the origin) of serotype C in Brazil has been confirmed by Panaftosa, the presence of this serotype in Africa and in Asia needs to be confirmed by a FMD reference laboratory and their origins should be determined.

2. Clinical samples and FMDV isolates submitted to WRL during 2004

In 2004, FAO WRL received 490 clinical samples or FMDV isolates, collected between 2000 and 2004, for virus isolation and characterisation (TABLE 2). Samples were collected in 23 countries located in Asia and Africa. A strong collaboration with OIE/Regional Reference Laboratory for the Sub-Saharan Africa (Botswana) has resulted in a large number of submissions. African FMD isolates were collected in eleven countries (Botswana, Eritrea, Malawi, Mozambique, Namibia, Rwanda, Sudan, Tanzania, Uganda, Zambia and Zimbabwe) between 2000 and 2004. FMD viruses obtained from the Middle East and from Southern Asia were collected in four and two countries (Iran, Israel, Saudi Arabia, and Yemen; Bhutan and Pakistan), respectively. Strains collected in South East Asia between 2002 and 2004 were obtained from Hong Kong, Malaysia, Philippines and Vietnam.

FMD virus types O, A, SAT 1, SAT 2 and Asia 1 were isolated at WRL from the above listed submissions. As usual, type O was the most prevalent identified serotype. Most of these viruses and also some received at the end of 2003 (Lao PDR, Thailand) were further characterised by partial genomic sequencing (complete VP1 gene). In addition, a selection of specimen was further studied regarding their antigenic relationship to vaccine strains. Details are presented in the 2004 report of the reference laboratory to OIE.

3. Phylogenetic and antigenic characteristics of FMD isolates submitted to WRL during 2004

3.1 FMDV serotype O

Serotype O was detected in Africa, Middle-East, Southern Asia and South East Asia.

African FMDV isolates of serotype O, collected in Rwanda, Tanzania, Uganda and Zambia, belonged to a recently characterised topotype, EA-2. Isolates collected in Tanzania belonged to three different sublineages within the same topotype, and some were very closely related to isolates collected in Rwanda the same year. Isolates collected in Eritrea and, Sudan belonged to the newly characterized topotype EA-3 (Fig. 1) and were related to those collected in Yemen. By virus neutralisation (VNT) it appeared that serotype O field isolates collected in Sudan matched to O Manisa and also by ELISA to O Manisa, 4147, 3039, Phi 95, Tai 189/87 and O TNN 24/84.

FMDV isolates obtained from the **Middle East** were collected in Iran, Israel, Saudi Arabia and Yemen. The ME-SA topotype / PanAsia strain was detected in Iran, Israel and Saudi Arabia (Fig.2). A genetic relationship was shown between Israeli isolates and one strain collected the same year in Iran (Fig.2). In addition, some isolates collected in Iran belonged to the Iran 2001 strain from the ME-SA topotype (Fig. 2). FMDV isolates obtained from Yemen belonged to two different sublineages within the EA-3 topotype (Fig. 1) and are related to African isolates (Sudan, Ethiopia and Eritrea). Considering antigenic relationships between vaccine strains and field isolates collected in Israel, a good match was obtained to O VNT and also by ELISA with O Manisa, 3039, Geshur Isr 2/85 and Dalton Isr 2/88.

From **Southern Asia,** FMDV isolates collected in Bhutan belonged to the ME-SA topotype / PanAsia strain (Fig. 3) and were related to isolates collected in 2003 in Bhutan and in Nepal. Considering 'r' values obtained by VNT, a good match was obtained with these isolates and O Manisa. By ELISA a good match was obtained with O Manisa, BFS, 3039, Phi 95, Tai 189/87 and O TNN 24/84, whereas a moderate to good match was obtained with 4174.

From FMDV isolates collected in **South East Asia,** the ME-SA topotype/ PanAsia strain was again the most prevalent virus (except in Hong Kong and Philippines where only strains of the pig adapted Cathay topotype were detected) (Fig. 4). In addition to the ME-SA topotype/ PanAsia strain, the Cathay topotype was also detected in Vietnam (Fig. 5) and isolates that belonged to the SEA topotype were detected in Lao PDR and in Malaysia, (Mya98 and Cam94 strains, respectively) (Fig. 5). It is noteworthy that some isolates related to the PanAsia strain obtained from Lao PDR, collected in the Bokeo region, showed a certain degree of genetic divergence (Fig. 5). It remains unexplained if these isolates are the result of a particular evolution of the PanAsia strain or if their origin can be traced to different countries, like India or China. According to 'r' values obtained by ELISA and/or virus neutralisation, field strains isolated in southeast Asia from serotype O were matching well with most of the vaccine isolates (O Manisa, Phi 95, TNN 24/84, Tai 189/87, 3039 and 4174).

The PanAsia strain is the most prevalent virus in Asia but does not occur in Africa. Genetic and antigenic analyses did not reveal FMDV field isolates of serotype O that were distantly related to known variants. These data suggest that current vaccine strains of FMDV serotype O remain appropriate.

3.2 FMDV serotype A

Serotype A FMDV isolates were received from the Middle east and South East Asia.

From the **Middle East,** only one isolate of FMDV serotype A, collected in Iran, was received at WRL. This isolate belonged to the Asia lineage and showed a genetic relationship with

isolates collected in the same country in 2003 (Fig. 6). According to VNT and r values obtained by ELISA, isolates collected in Iran in 2003, and related to the isolate collected in 2004, showed poor matching with A_{22} Irq 24/64, moderate matching with A Sau 95, good to moderate matching with A Irn 96, A Sau 23/86, A Irn 87 and a good matching with A Irn 99 and A May 97

From **South East Asia**, FMDV serotype A isolates were received in 2003 and 2004 from Lao PDR and Thailand, and from Malaysia and Vietnam, respectively. It is the first report of the occurrence of serotype A in Vietnam. These isolates were closely related and were belonging to the Asia lineage (Fig. 6 and 7). However, isolates collected in Vietnam were closely related to strains responsible for outbreaks in Thailand in 2003 and 2004 (Fig. 7). Isolates of serotype A collected in Thailand and Malaysia showed good matching with May 97, Sau 23/86, Sau 95, moderate to good with IRN87, moderate with Tai 118/87 and Tai ASK 99 and no or poor matching with A22 Irq and A5925. Antigenic characterisation of Vietnamese isolates is still in progress.

The distribution of FMDV serotype A seems to have changed in south-east Asia. As usual isolates from this serotype show a high degree of genetic and antigenic variability. Variable antigenic matching results are observed with vaccine strains. However, if A22 Irq often shows a poor matching with field isolates, r value data suggests that A Irn 99 and May 97 could be two good candidate vaccine strains.

3.3 FMDV serotype SAT1 and SAT2

In general, SAT 1 FMDV collected in Malawi, Namibia, Zambia, and Zimbabwe showed a high degree of divergence. However, all SAT 1 isolates from Zimbabwe, except one, were closely related. One SAT1 isolate collected in Zambia was closely related to viruses collected in Malawi and a second Zambian isolate was closely related to a virus collected in Namibia, in line with their geographical origins within different areas of Zambia (Fig. 8). SAT 1 collected in Zambia showed a high degree of divergence compared to isolates from the same country collected in 2000 (Fig. 8).

SAT 2 FMDV submitted from Botswana, Malawi, Rwanda and Zimbabwe also showed a high degree of genetic diversity (Fig. 9 and 10). Four distinct lineages were found in Zimbabwe; one included viruses from Botswana collected in 2002, whereas the other three appeared to be unique to Zimbabwe. Isolates collected in Malawi in 2003 were distinct from all the other viruses examined (Fig. 9), but isolates from the same country collected in 2004 were closely related to those collected in Tanzania at the same time (Fig. 10). From Rwanda, FMDV collected in 2004 was closely related to one isolated in 2003 (Fig. 10).

SAT FMDV remain in Africa and show a very high degree of genetic variability. The phylogenetic analysis shows that some SAT outbreaks have a transboundary origin and that different sublineages of viruses cocirculate. Conversely, some sublineages persist in the same regions demonstrating continuing endemicity in many African countries. It is, however, difficult to assess the antigenic diversity of the SAT viruses because of a lack of reagents available at WRL (BVS and vaccine strains used in the field).

3.5 FMDV serotype Asia1

The Asia 1 isolates obtained from Iran and Pakistan during 2004 were distinct but part of the same lineage (Fig. 11). Isolates collected in Pakistan were closely related to those isolated in 2003 (Fig. 11).
For serotype Asia 1, a good matching 'r' value obtained by VNT and ELISA, was obtained with Asia1 Shamir 3/89 and WBN 117/85.

Asia 1 FMDV remains in Asia. Isolates received at WRL show a low degree of genetic and antigenic variability. Current vaccine strains remain appropriate.

4. Conclusions

FMDV is still active in many parts of the world, but only some countries report their FMD outbreaks or try to characterise FMDV isolates. Serotype C seems to have reappeared in South America and in Africa after not having been reported for almost ten years. The classical distribution of serotypes has changed in South East Asia with the first report of serotype A in Vietnam. The situation in the Middle East remains a concern because a very low number of clinical samples was submitted in 2004 from this area, despite the fact that new antigenic FMDV isolates are usually emerging there.

The PanAsia strain of serotype O remains the most prevalent FMDV strain in the Middle East, Southeast Asia and the Far East, but not in Africa. FMDV strains of serotype A that are present in Middle East and southern Asia have a very high degree of sequence variations. Serological matching tests suggest that available vaccine reserves for serotype O are still appropriate, but as in previous years, serotype A viruses from the Middle East and Asia exhibit considerable antigenic variation. The strains that are circulating in Iran are poorly matched by traditional vaccine strains such as A_{22} Iraq, but some newly evaluated vaccine strains (such as A May 97 or A Irn 99) show promise. Vaccine recommendations for antigen banks, reviewed at the EUFMD Research Group Meeting in Gerzensee, September 2003 (http://www.fao.org/ag/againfo/commissions/en/documents/reports/switz/FINAL%20REPORT1.pdf), seem to remain relevant.

Global surveillance performed by WRL FMD will be improved by continuing efforts to solicit sample submissions, however, the cost and difficulties of sending infectious goods by air remains a considerable constraint. An increased effort is also made in WRL/FMD to sequence the complete VP1 gene of all received FMDV isolates and all capsid genes for selected isolates. Ongoing efforts are made to develop alternative methods of antigenic matching based on sequencing data.

A better coordination between reference laboratories for FMD, around the world and in particular with those located in South America and in Russia, is indispensable to develop an efficient global surveillance.

JF Valarcher, NF Ferris, DJ Paton
14/01/05

TABLE 1: Countries that have reported FMD outbreaks in 2004 (up to 07/01/05) and FMD serotypes related to those outbreaks
Source: OIE Handistatus / bulletins / yearbook / PANAFTOSA bulletins/ Promedmail and results determined by FAO WRL/FMD

Countries	2004 (up to 07/01/05)
Benin	(?)
Bhutan	O
Brazil	O* , C*
Burkina Faso	(?)
Cambodia	(?)
Chad	(?)
Colombia	A*
Ecuador	O*
Eritrea	O
Ethiopia	(?)
Georgia	(?)
Ghana	(?)
Hong Kong	O
India	O*, A*, Asia 1*
Iran	O, A, Asia 1*
Israel	O
Kenya	O*, A*, C* SAT 1*, 2*
Kuwait	(?)
Lao PDR	O*, A*
Malaysia	O, A*
Malawi	SAT 2*
Mali	(?)
Mongolia	O*
Myanmar	O*
Nepal	O*, A*, Asia 1*
Niger	O*,SAT 1*
Nigeria	(?)
Pakistan	Asia1
Peru	O*
Philippines	O
Russia	O*
Rwanda	O, SAT 2
Saudi Arabia	O
Senegal	(?)
South Africa	SAT 2*
Sri Lanka	(?)
Sudan	O
Tajikistan	(?)
Tanzania	O, SAT 1*, 2*
Thailand	O*, A*
Togo	SAT 2*
Turkey	O*,A*
Uganda	O, SAT1*, SAT 2*
Venezuela	O*,A*
Vietnam	O, A
Yemen	O
Zambia	O*, SAT 1, 2*, 3*
Zimbabwe	SAT 1*, 2

*: not confirmed by WRL
(?): FMD outbreaks(s) reported but FMDV not characterised
!: Reported on Promedmail

TABLE 2: FAO World Reference Laboratory for Foot and Mouth Disease*: cumulative report for January-December 2004.

Country		No. of	ELISA/Virus isolation in cell culture									RT-PCR for FMD (or SVD) virus (where appropriate)		
		samples	FMD virus serotypes							SVD virus	NVD			
			O	A	C	SAT 1	SAT 2	SAT 3	Asia 1			Pos	Neg	Not tested
BHUTAN		48	13	-	-	-	-	-	-	-	35	27	21	-
CHINA (HONG KONG)		12	9	-	-	-	-	-	-	-	3	11	1	-
ERITREA		31	5	-	-	-	-	-	-	-	26	5	26	-
IRAN		21	4	1	-	-	-	-	1	-	15	9	12	-
ISRAEL		6	3	-	-	-	-	-	-	-	3	6	-	-
ITALY		16	-	-	-	-	-	-	-	16	-	11[a]	-	5
MALAWI		1	-	-	-	-	-	-	-	-	1	-	1	-
MALAYSIA		3	3	-	-	-	-	-	-	-	-	3	-	-
PAKISTAN		8	-	-	-	-	-	-	2	-	6	4	4	-
PHILIPPINES		12	12	-	-	-	-	-	-	-	-	11	1	-
PORTUGAL		2	-	-	-	-	-	-	-	2	-	2[a]	-	-
RWANDA		3	2	-	-	-	1	-	-	-	-	2	-	1
SAUDI ARABIA		1	-	-	-	-	-	-	-	-	1	1	-	-
SUDAN		37	11	-	-	-	-	-	-	-	26	1	36	-
TANZANIA		21	6	-	-	-	5	-	-	-	10	12	9	-
UGANDA		60	8	-	-	-	-	-	-	-	52	10	50	-
VIETNAM		5	3	2	-	-	-	-	-	-	-	5	-	-
YEMEN		76	31	-	-	-	-	-	-	-	45	35	41	-
ZAMBIA		16	-	-	-	15	-	-	-	-	1	13	3	-
ZIMBABWE		1	-	-	-	-	1	-	-	-	-	1	-	-
TOTAL		**380**	**110**	**3**	**-**	**15**	**7**	**-**	**3**	**18**	**224**	**169**	**205**	**6**

Key

*	Institute for Animal Health, Pirbright Laboratory, Woking, Surrey GU24 0NF
VI/ELISA	FMD (or SVD) virus serotype identified following virus isolation in cell culture and antigen detection ELISA
FMD	foot-and-mouth disease
SVD	swine vesicular disease
NVD	no foot-and-mouth disease, swine vesicular disease or vesicular stomatitis virus detected
RT-PCR	reverse transcription polymerase chain reaction for FMD (or SVD) viral genome
[a]	positive by RT-PCR for SVD but not FMD viral genome

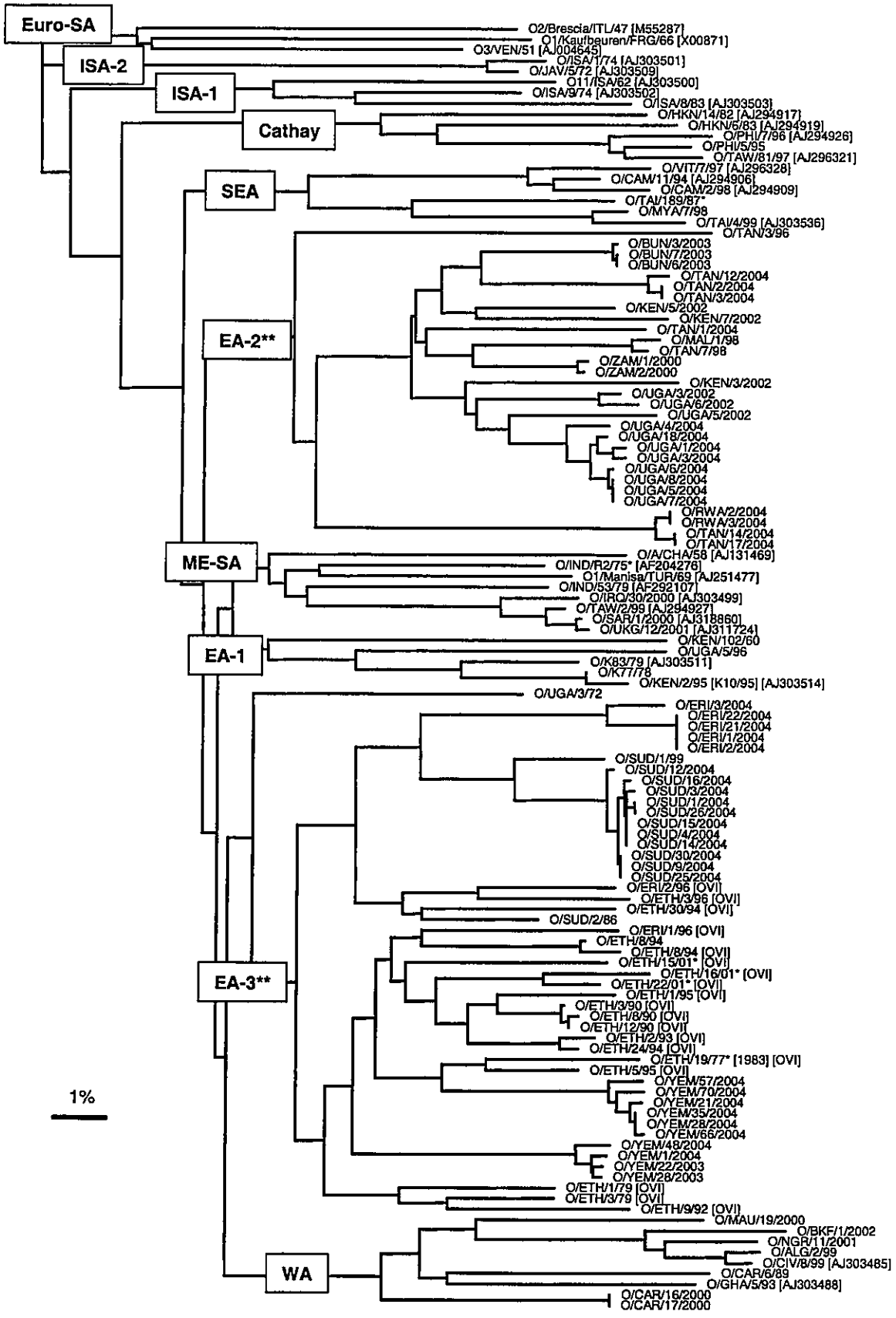
The following samples were additionally received by the FAO World Reference Laboratory for Foot and Mouth Disease in 2004:

Country	Sample year	No. of samples	ELISA/Virus isolation in cell culture									RT-PCR for FMDV		
			FMDV serotypes							SVDV	NVD			
			O	A	C	SAT 1	SAT 2	SAT 3	Asia 1	(a)	(b)	Pos	Neg	NT
BHUTAN	2003	4	3	-	-	-	-	-	-	-	1	4	-	-
BOTSWANA	2002	2	-	-	-	-	2	-	-	-	-	2	-	-
ITALY	2003	6	-	-	-	-	-	-	-	6	-	6[c]	-	-
MALAWI	2000	3	-	-	-	3	-	-	-	-	-	3	-	-
	2001	2	-	-	-	2	-	-	-	-	-	2	-	-
	2003	2	-	-	-	-	2	-	-	-	-	2	-	-
MALAYSIA	2002	3	3	-	-	-	-	-	-	-	-	3	-	-
	2003	7[a]	4	4	-	-	-	-	-	-	-	7	-	-
MOZAMBIQUE	2002	1	-	-	-	-	1	-	-	-	-	1	-	-
NAMIBIA	2000	1	-	-	-	1	-	-	-	-	-	1	-	-
VIETNAM	2003	1	1	-	-	-	-	-	-	-	-	1	-	-
YEMEN	2003	35	9	-	-	-	-	-	-	-	26	8	27	-
ZAMBIA	2000	4	2	-	-	2	-	-	-	-	-	4	-	-
ZIMBABWE	2001	2	-	-	-	-	2	-	-	-	-	2	-	-
	2002	14	-	-	-	-	14	-	-	-	-	14	-	-
	2003	23[b]	-	-	-	7	18	-	-	-	1	20	1	2
TOTAL		**110**	**22**	**4**	**-**	**15**	**39**	**-**	**-**	**6**	**28**	**80**	**28**	**2**

Key

*	Institute for Animal Health, Pirbright Laboratory, Woking, Surrey GU24 0NF
VI/ELISA	FMD (or SVD) virus serotype identified following virus isolation in cell culture and antigen detection ELISA
FMD	foot-and-mouth disease
SVD	swine vesicular disease
NVD	no foot-and-mouth disease, swine vesicular disease or vesicular stomatitis virus detected
[a]	one sample from Malaysia contained a mixture of FMD virus types O and A
[b]	three samples from Zimbabwe contained a mixture of FMD virus types SAT 1 and SAT 2
[c]	positive by RT-PCR for SVD but negative for FMD viral genome

Fig. 1 Neighbor-joining tree comparing the complete VP1-coding sequences of type O FMDV collected in Africa and Yemen

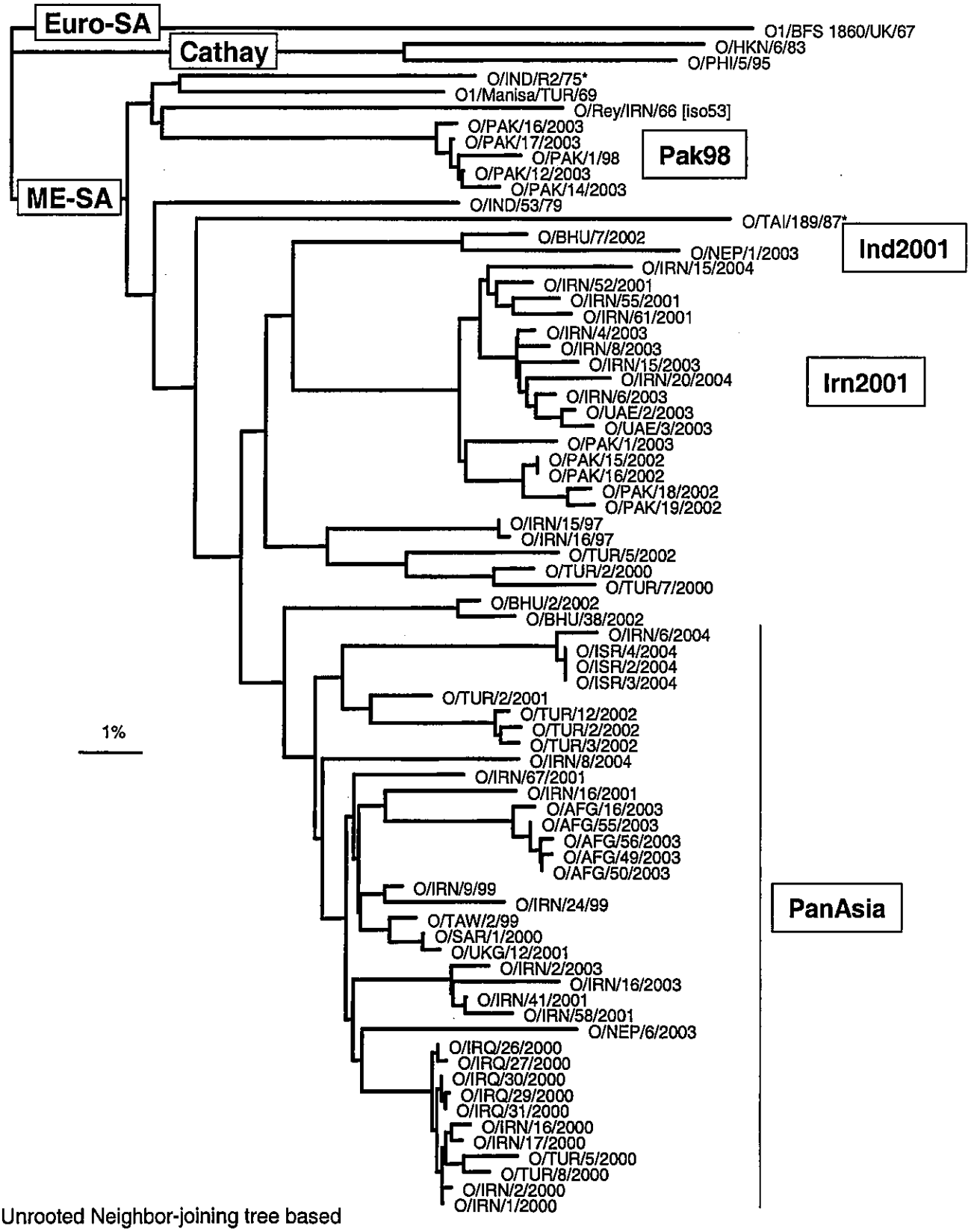


Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene (~639 nt). The tree was outgroup-rooted using the Euro-SA topotype sequences. Sequences from the Onderstepoort Veterinary Institute (OVI), South Africa were shorter (495 nt).

* Not a WRLFMD Ref. No.

** proposed new topotypes

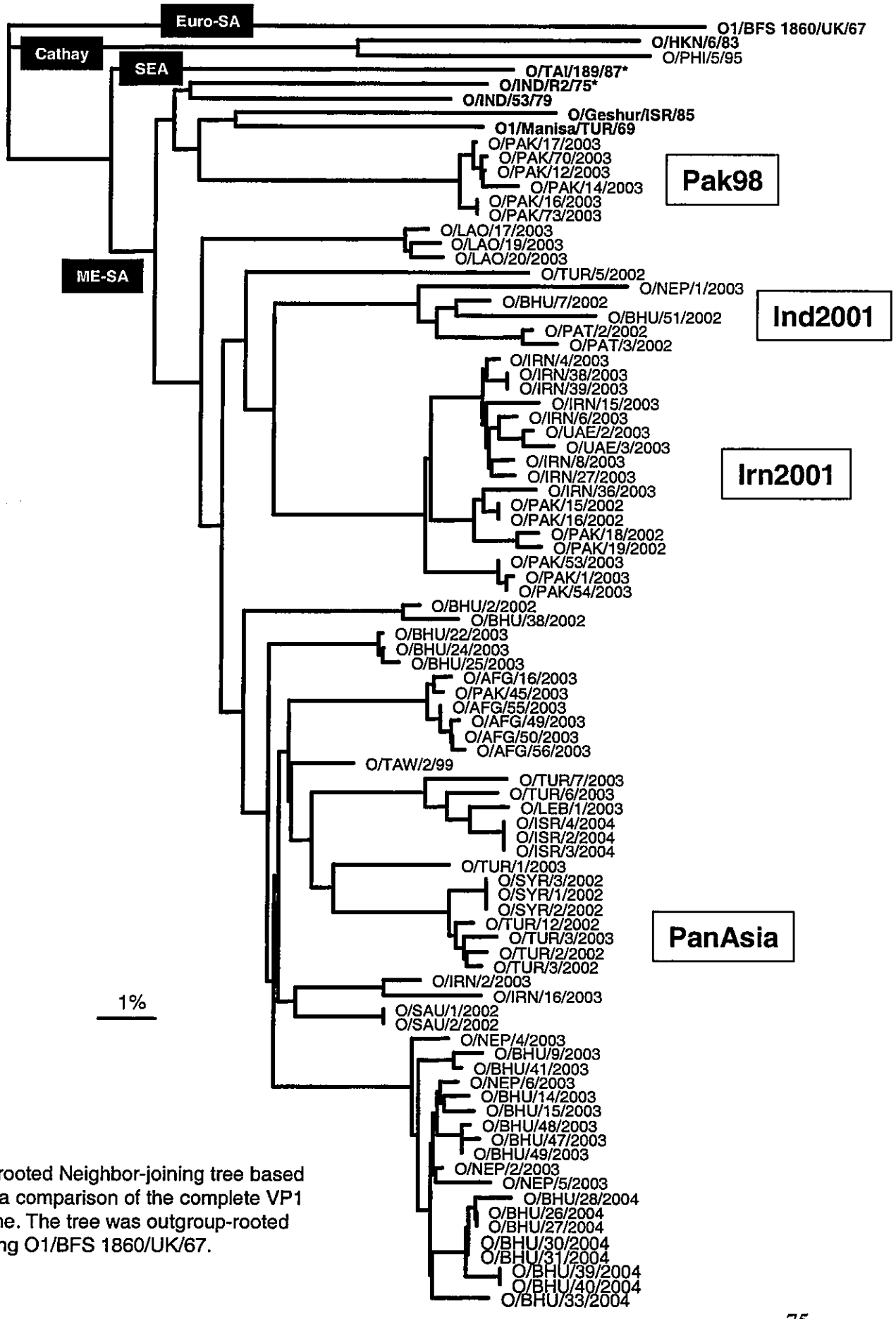
Fig. 2 Neighbor-joining tree comparing the complete VP1-coding sequences of type O FMDV collected in Iran and Israel



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene. The tree was outgroup-rooted using O1/BFS 1860/UK/67.

* not a WRLFMD ref. no.

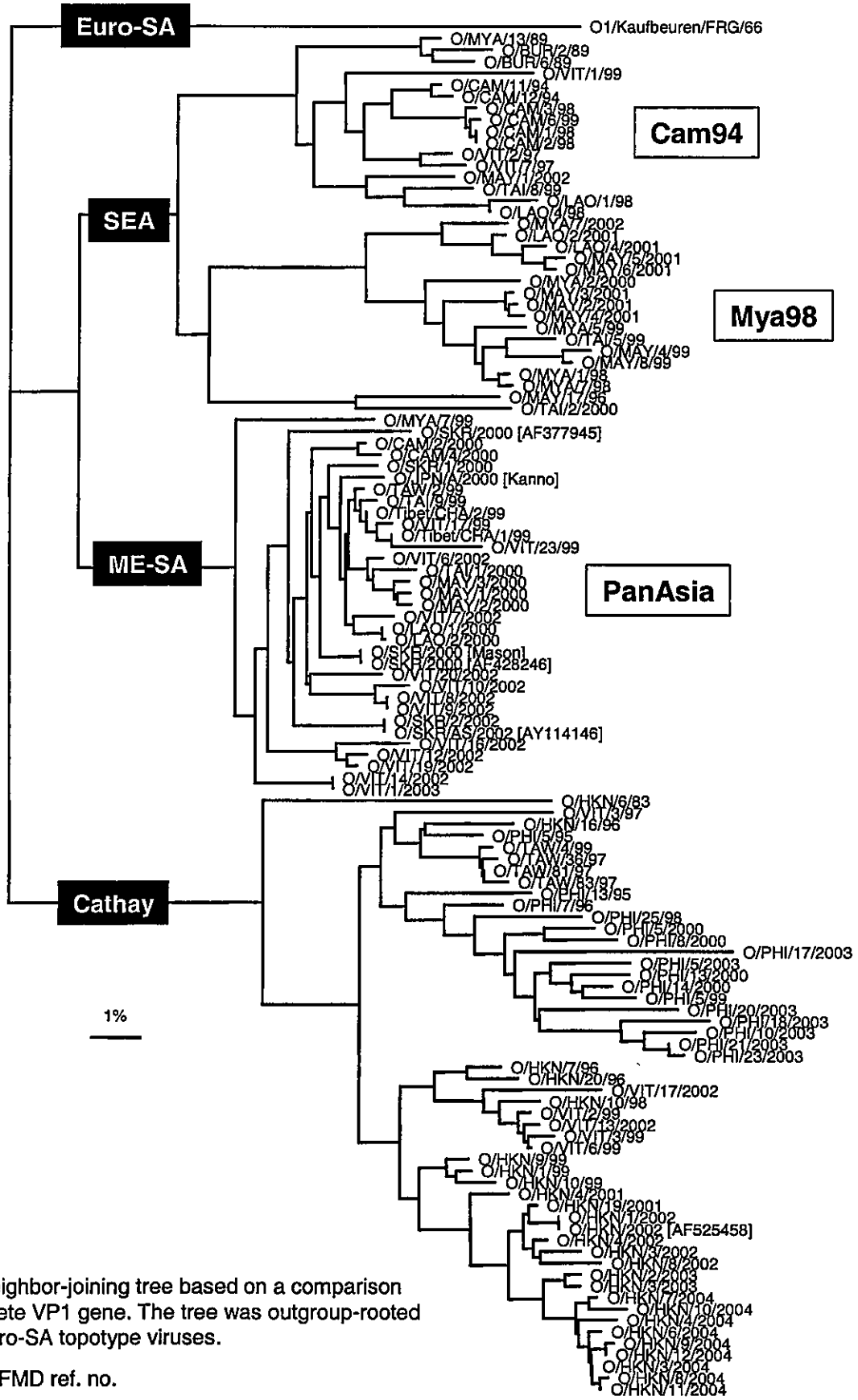
Fig. 3 Neighbor-joining tree comparing the complete VP1-coding sequences of type O FMDV collected in Bhutan



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene. The tree was outgroup-rooted using O1/BFS 1860/UK/67.

* not a WRLFMD ref. no.

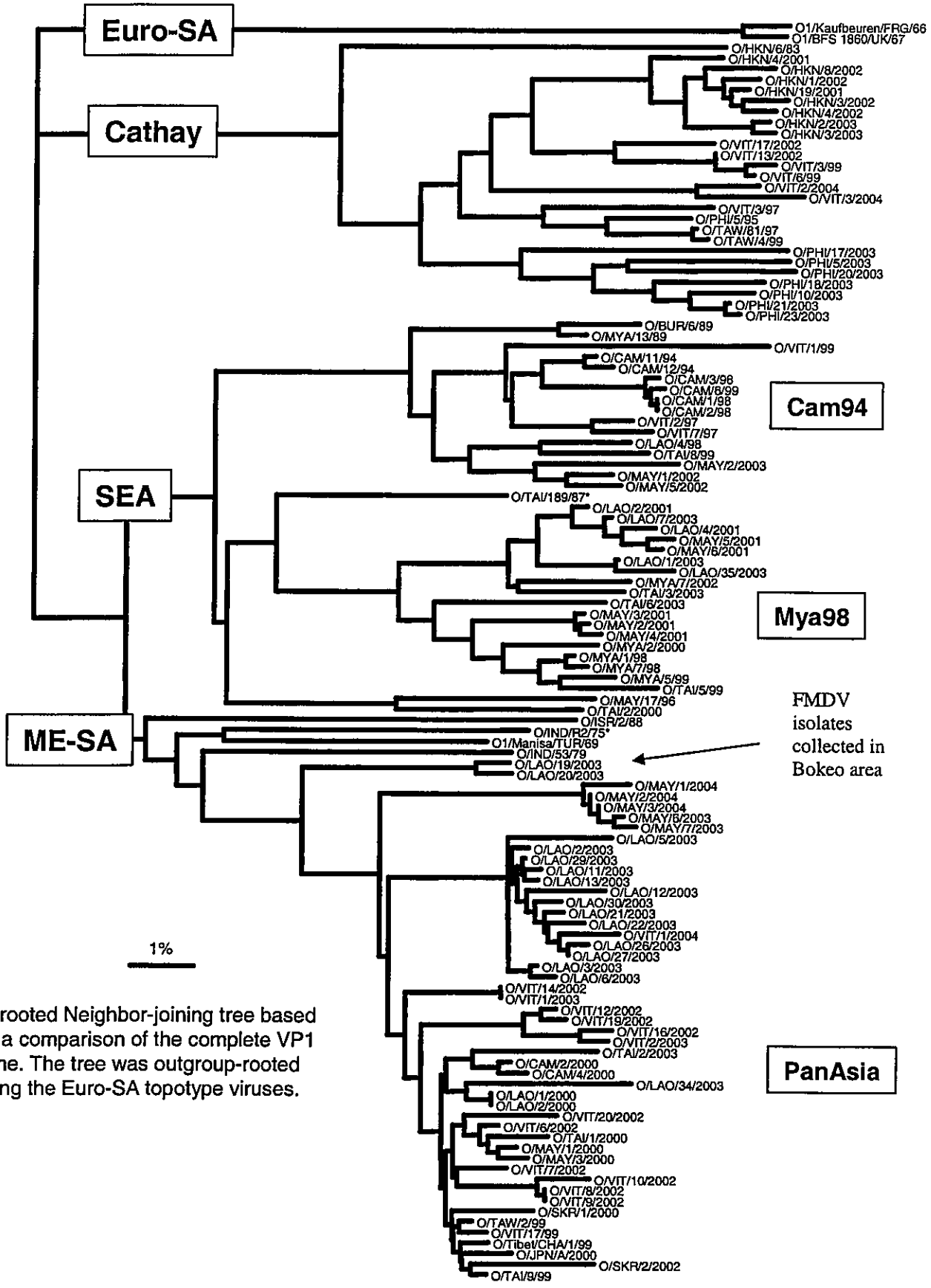
Fig. 4 Neighbor-joining tree comparing the complete VP1-coding sequences of type O FMDV collected in Hong Kong and Philippines.



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene. The tree was outgroup-rooted using the Euro-SA topotype viruses.

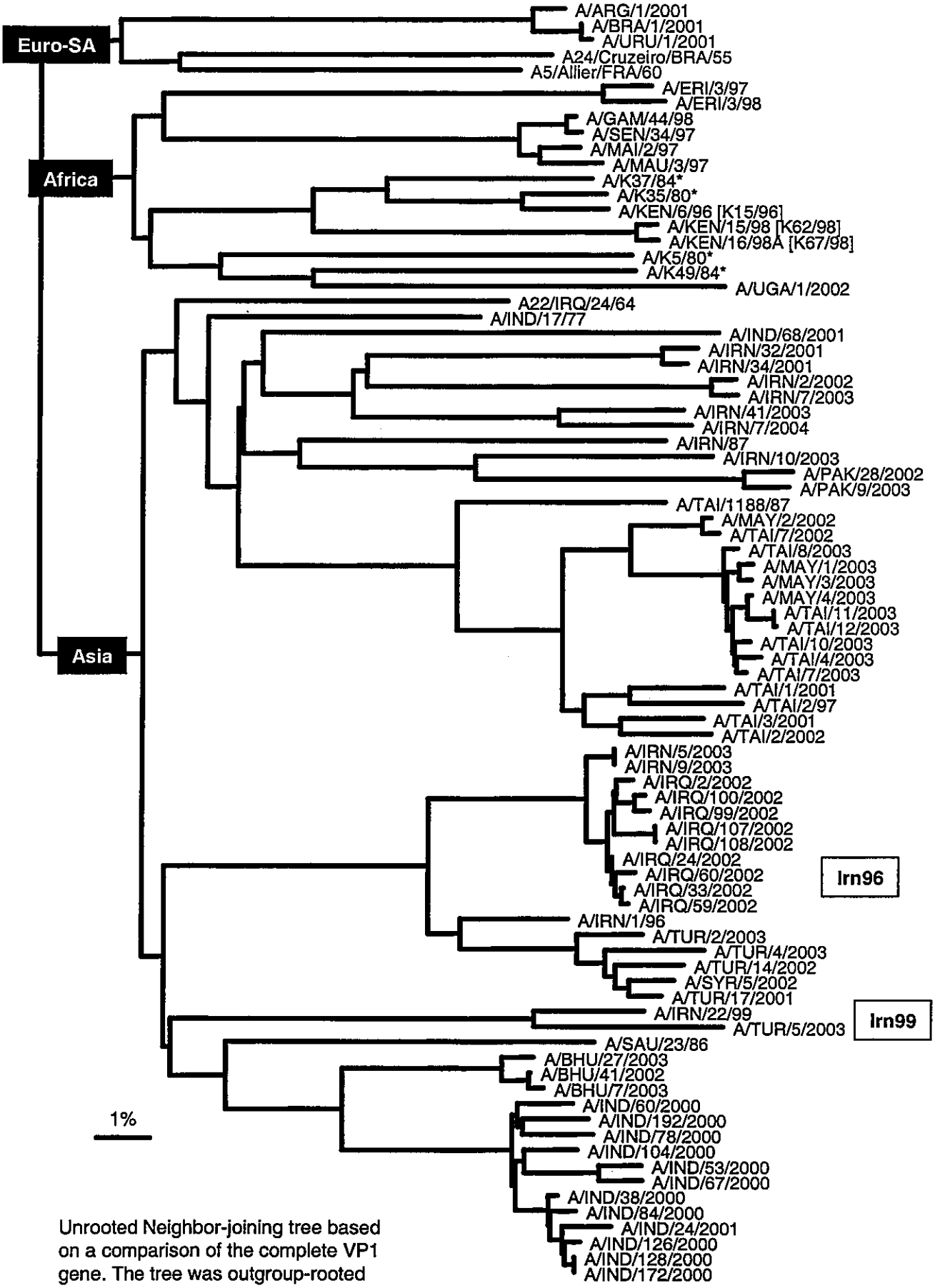
* not a WRLFMD ref. no.

Fig. 5 Neighbor-joining tree comparing the complete VP1-coding sequences of type O FMDV collected in Lao PDR, Malaysia and Thailand.



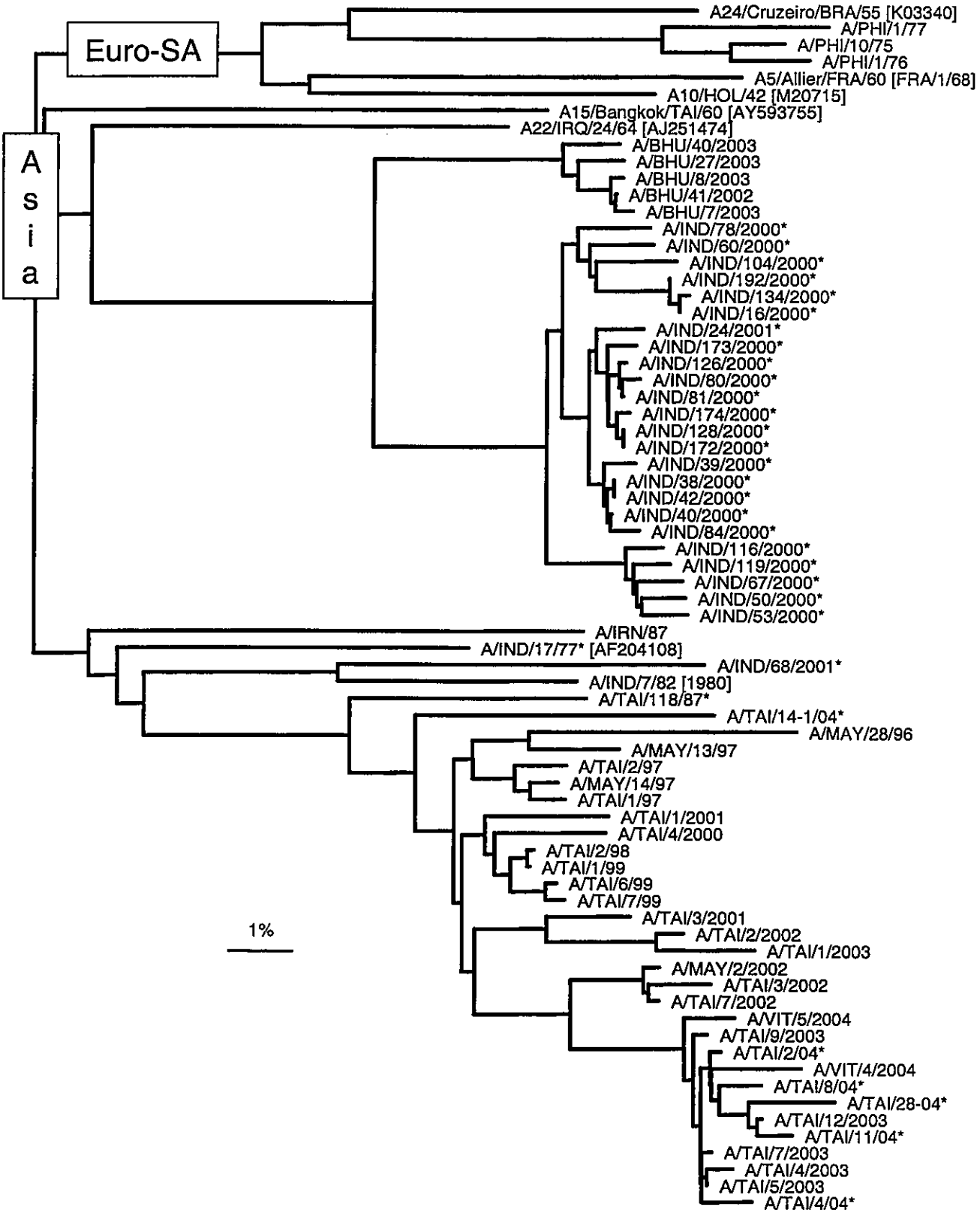
Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene. The tree was outgroup-rooted using the Euro-SA topotype viruses.

Fig. 6 Neighbor-joining tree comparing the complete VP1-coding sequences of type A FMDV collected in Iran.



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene. The tree was outgroup-rooted using members of the Euro-SA topotype.

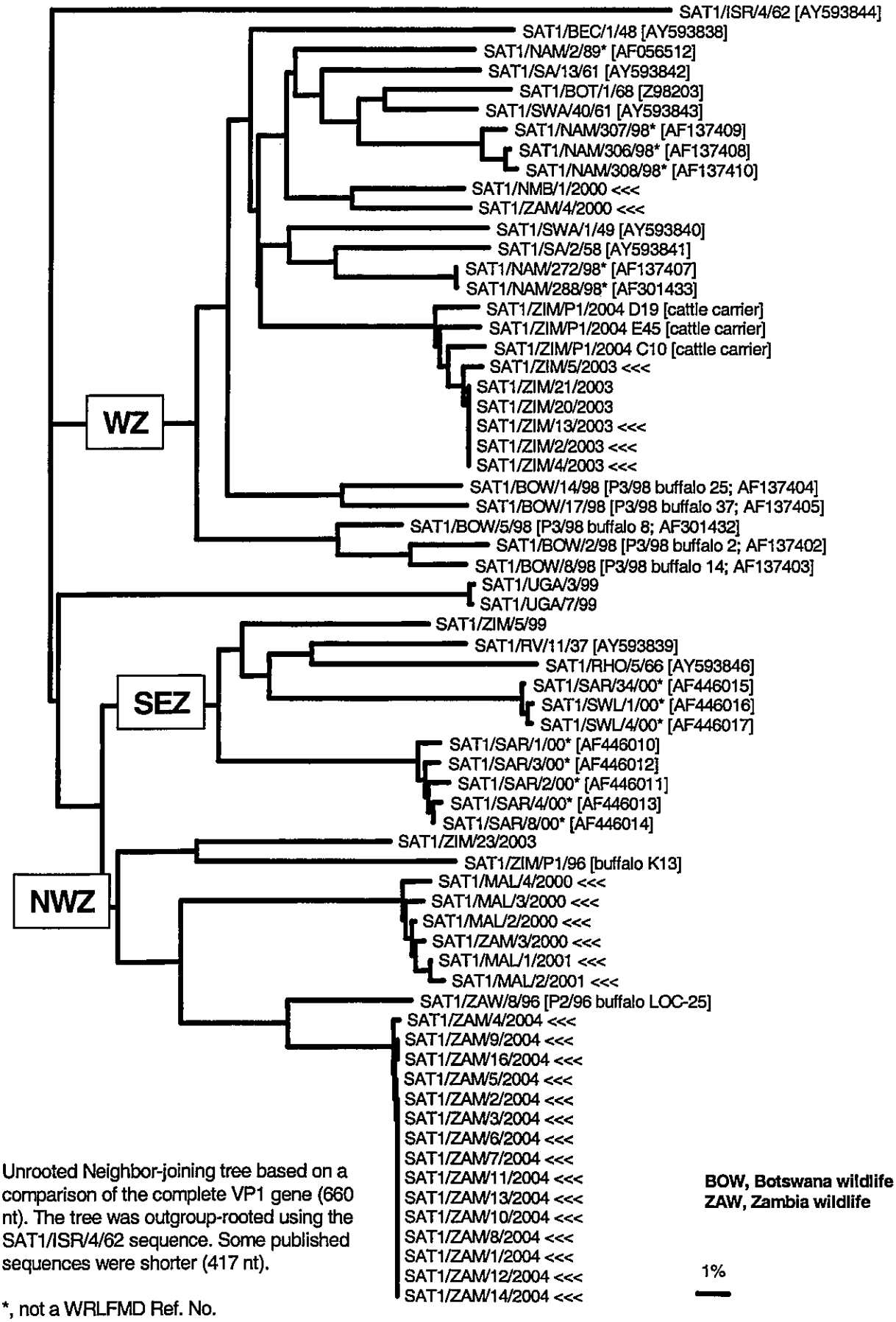
Fig. 7 Neighbor-joining tree comparing the complete VP1-coding sequences of type A FMDV collected in Malaysia, Thailand and Vietnam,.



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene. The tree was outgroup-rooted using the Euro-SA topotype viruses.

* not a WRLFMD ref. no.

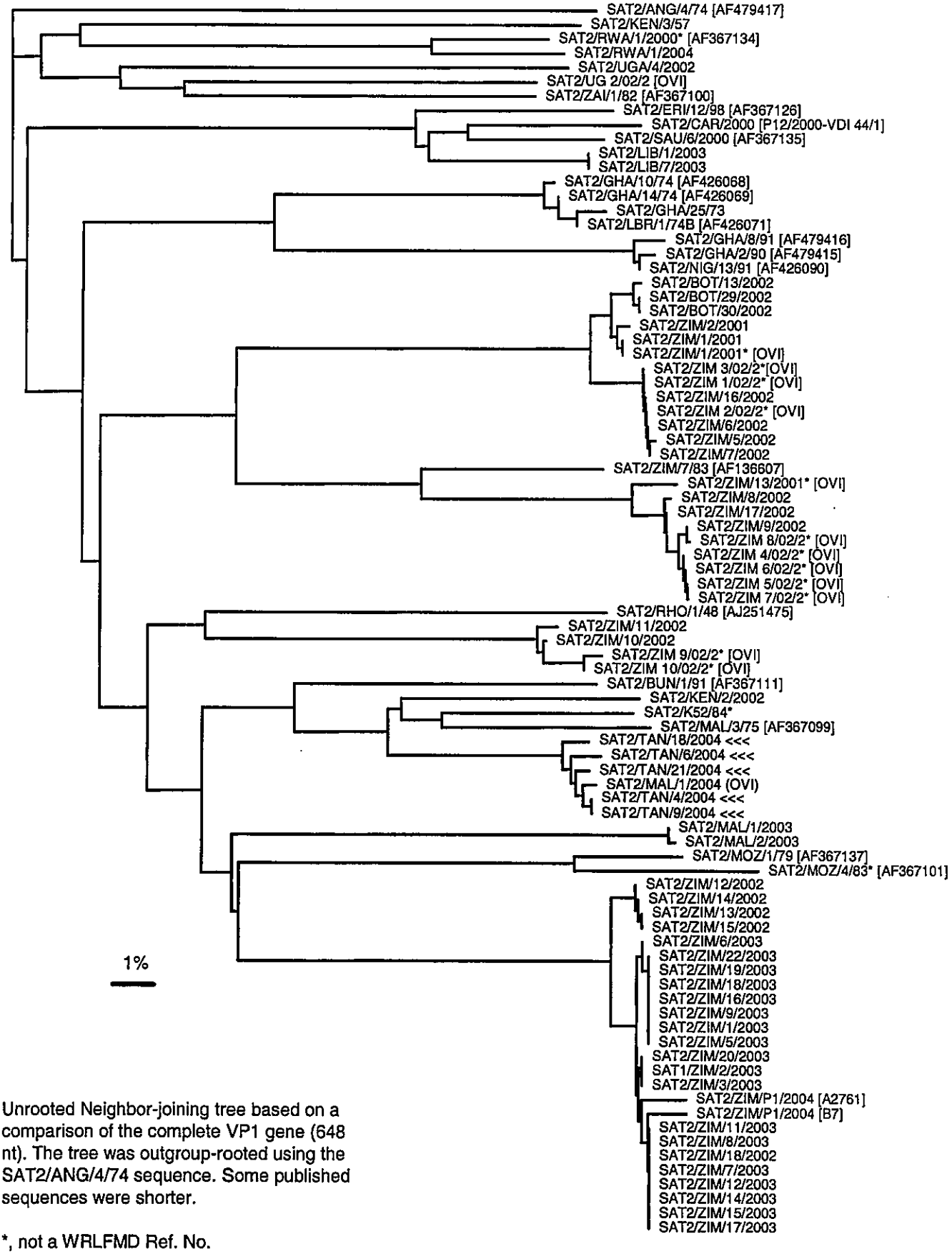
Fig. 8 Neighbor-joining tree comparing the complete VP1-coding sequences of type SAT1 FMDV collected between 2000 and 2004 in Malawi, Namibia, Zambia and Zimbabwe.



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene (660 nt). The tree was outgroup-rooted using the SAT1/ISR/4/62 sequence. Some published sequences were shorter (417 nt).

*, not a WRLFMD Ref. No.

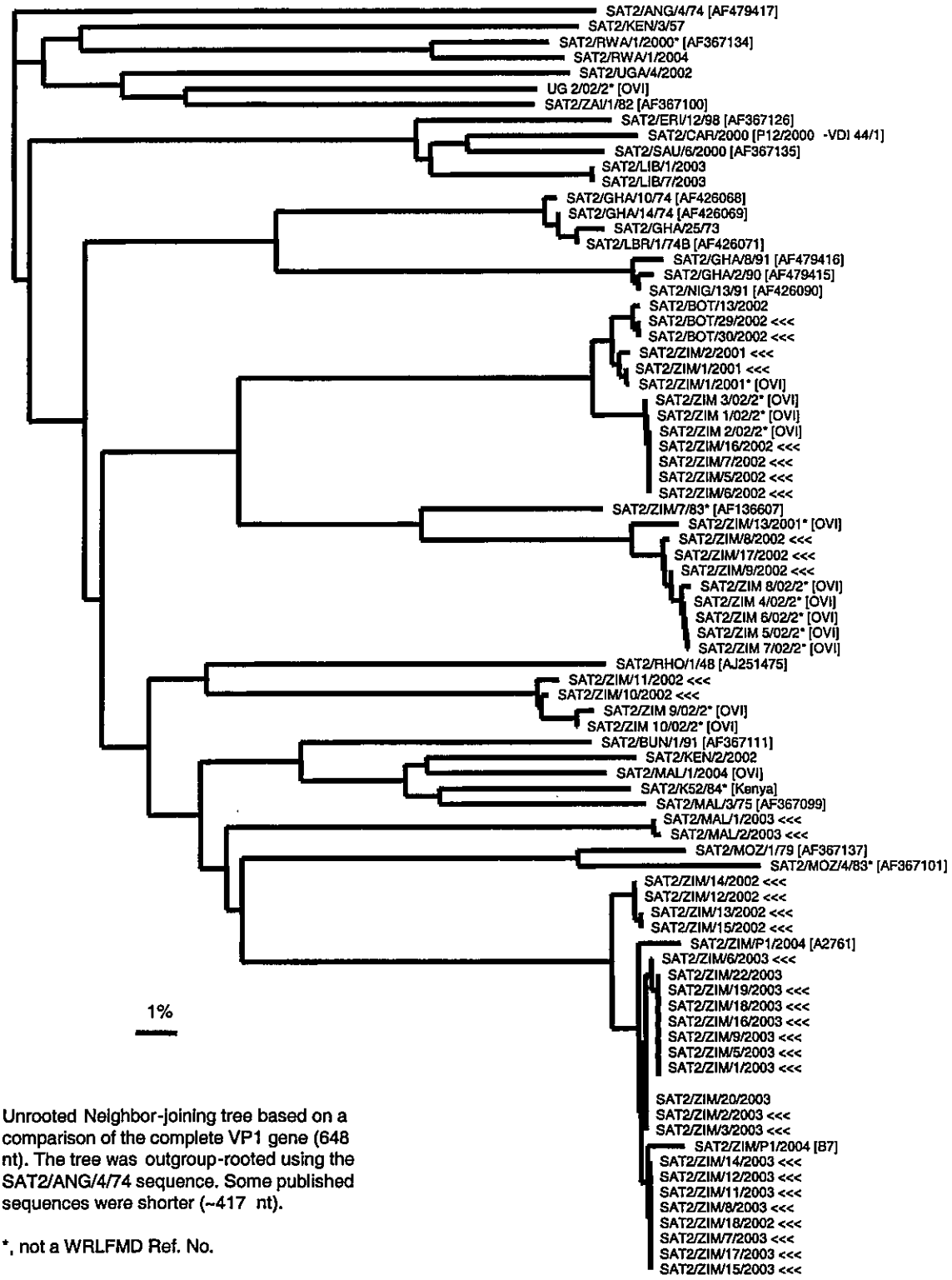
Fig. 9 Neighbor-joining tree comparing the complete VP1-coding sequences of type SAT2 FMDV collected in Tanzania (2004).



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene (648 nt). The tree was outgroup-rooted using the SAT2/ANG/4/74 sequence. Some published sequences were shorter.

*, not a WRLFMD Ref. No.

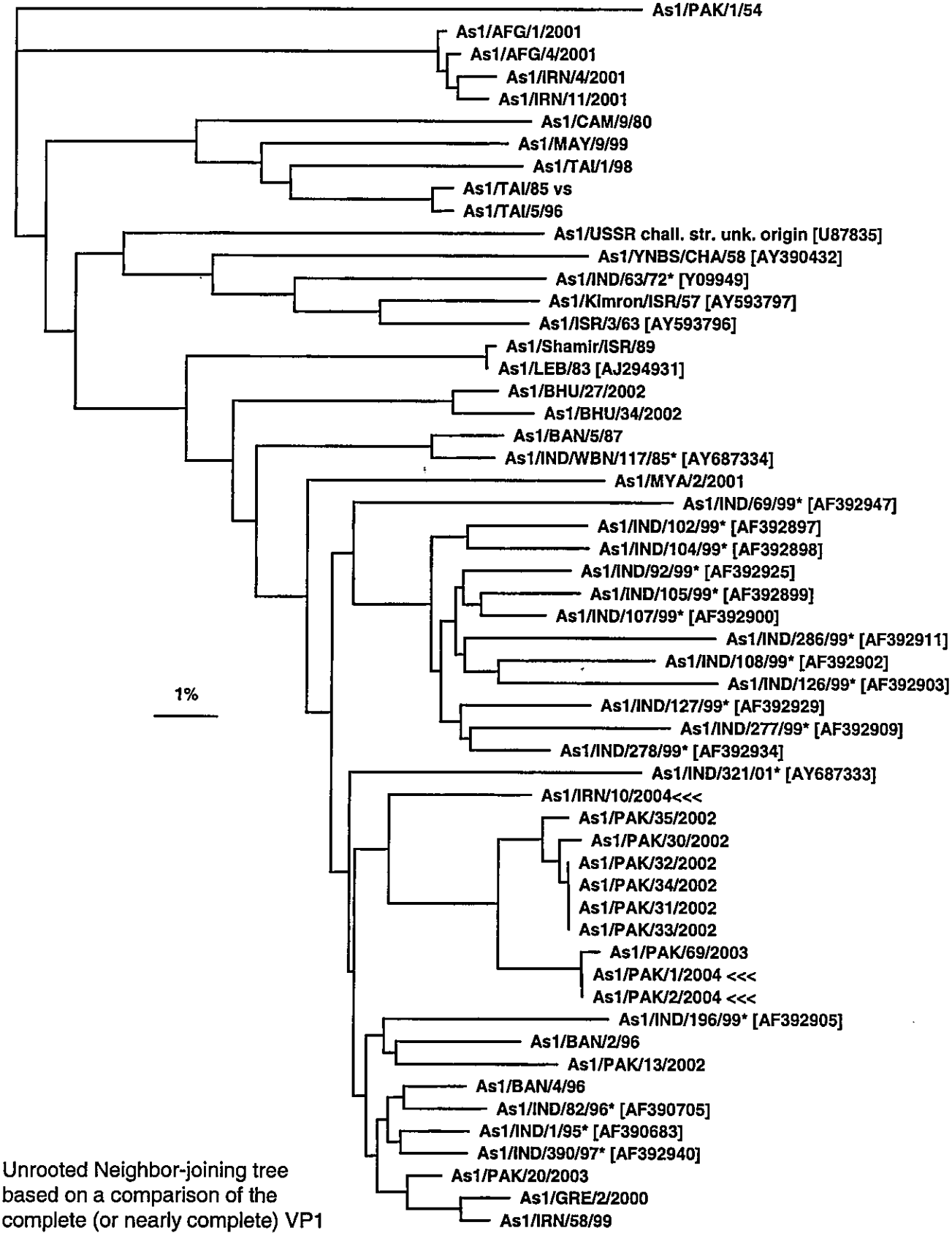
Fig. 10 Neighbor-joining tree comparing the complete VP1-coding sequences of type SAT 2 FMDV collected between 2000 and 2004 in Botswana, Malawi, Namibia and Zimbabwe.



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene (648 nt). The tree was outgroup-rooted using the SAT2/ANG/4/74 sequence. Some published sequences were shorter (~417 nt).

*, not a WRLFMD Ref. No.

Fig. 11 Neighbor-joining tree comparing the complete VP1-coding sequences of type Asia1 FMDV collected in Iran and Pakistan (2004).



Unrooted Neighbor-joining tree based on a comparison of the complete (or nearly complete) VP1 gene (~633 nt). The tree was outgroup-rooted using PAK/1/54.

Appendix 11

EUFMD Strategic Plan - 2005-8 (4 yrs)

Background

The 70th Session recommended that a plan be developed for discussion at the 71st Session, with the intention that this be presented to the General Session in April 2005. A first draft was developed and discussed with the members of the Executive who attended the OIE Conference in Avila in September 2004. A second draft is presented below.

Vision

- Europe free of FMD, the risk of entry understood and managed
- progressive reduction in FMD incidence and distribution in Turkey over 4 yrs, pre-eradication
- European expertise in FMD control enhanced, in each member state and with benefit to reduction of risk in the wider region.

Strategy

- Focus on four key themes –
  - FMD control projects
  - FMD observation – virus circulation and risk
  - Coordination of technical studies to address constraints to policy implementation
  - Capacity building – maintaining and raising expertise across Europe in the scientific basis of FMD epidemiology and control

- Develop and maintain a balance between beneficiaries of the actions; between actions oriented to reduce risk to south-eastern Europe, and those to improve risk awareness (surveillance for virus threats where they are identified), and actions to raise European expertise across all member countries.
- Build on the platform of member country support.
- Build for the long term through partnership with OIE, on the basis of the FAO/OIE Agreement and on the structure of the Global Framework for Control of TADS (GF-TADS).
- Build on the partnership with EC, via a re-negotiated financing and Implementing Agreement with DG-SANCO.
- Build on the coordinating role of the EUFMD standing technical committee.
- Develop new financing mechanisms with additional partners.

Focus

Four areas for action -

1. Interventions – support to FMD control actions
   a. Turkey – Thrace region/western buffer zone – stability, potential for FMD freedom.
   b. Turkey – Anatolia; support for surveillance and monitoring/ evaluation of FMD control (2005-). Support development of long-term eradication projects.
   c. Caucasus; formulate project/negotiate funding for regional FMD control project to succeed short term actions in 2004-5.
   d. Iran/Turkish borders:

i. implement phase 1 surveillance project (requested DG-SANCO);
ii. establish effective early warning of virus circulation to inform risk management in neighbouring country (Turkey/Caucasus countries).

2. FMD observation – virus circulation and risk
   a. Develop the provision of small grants/support to address lack of virus typing information from outbreaks/regions in risk regions for Europe.
   b. Contribute to development of global FMD epidemiologic modelling; addressing lack of tools and information for European risk analysis, vaccine bank contents.

3. Coordination of technical studies to address constraints to policy implementation
   a. Standing Technical Committee (Research Group) – continue technical working groups/activities to address constraints to policy application.
   b. Coordination of research on FMD control; implement DG-Research funded FMD Laboratory Co-ordination Action:
      i. Input into Steering Committee with OIE, EC and WRL;
      ii. Specific inputs to Refinement of FMD control policies - Secretariat/consultants (2005-2007).

4. Capacity building – maintaining and raising expertise across Europe in the scientific basis of FMD epidemiology and control
   a. Contribute to development of online/distance training; addressing lack of experience and expertise in FMD free Europe, and parallel lack of expertise in many endemic countries; logical use of EUFMD workshops in continuing professional development.
   b. Addressing a pan-European need for expertise in the European national expert groups required to fullfil EC Directives and control policy.

Information dissemination is cross-cutting to each of the above, but in view of the importance could be considered action area 5.

Campaign objectives (Targets) for 2008 (*not discussed in Avila*)

Targets to be determined for each area of action, but may include:

1. No incidence of FMD in officially free countries of Europe over 4 years.
2. No incidence of Asia-1 in Turkey over the 4 year period.
3. No incidence of other exotic FMD types entering Turkey over this period.
4. FMD surveillance targets and reporting frequency in Cacausus countries and in Iran (Iraq, Syria) met.
5. Incidence of FMD in Thrace region of Turkey reduced to zero in period; targets for virus surveillance in Thrace region met.
6. Reduction in incidence of type A and type O FMD in Anatolia – defined by reduction in Provinces reporting, period free, incidence and absence of virus circulation.

Similarly, outline targets need to be elaborated for:

1. Improvement in virus observation - WRL function.
2. Improvement in coordination of technical studies.

3. Improvement in European expertise in FMD epidemiology, diagnosis and control - capacity building target.

For some of these, process indicators rather than targets may be appropriate (improvement in number of samples received, number of endemic countries from which samples received/typed, workshops, experts trained etc.)

Financial Strategy

Recent or Current strategy has been:

1. Use of Member contributions to fund Secretariat and core support functions (contract to WRL for services, part funding standing technical committee meetings, specific workshops identified by the Executive): 383,000 USD/yr, 2004-5.
2. Extra-budgetary funding for permanent and temporary activities in Turkey, Caucasus, and for support of FMD control in EU, via DG-SANCO Implementing Agreement – 2.45 million USD, 2001-2004.
3. Member countries – Ireland – Associate professional Officer (APO), 2003-4.
4. Develop coordination with EC funded research actions, joint proposals – DG-Research Coordination Action – 60k (2005-2007).

Future strategy

1. Address the decline in contributions resulting from depreciation of the US$ and inflationary rise in cost, by agreement of new budget for contributions in 2006-7.
2. Renegotiate EC Implementing Agreement to provide continuity - from January 2005.
3. Greater use of in-house and out-sourced professional support for project development (formulation) and management– HQ or at in-country Duty Station, short-term appointments, full-time or consultants.
    a. For project management, funded under EC Implementing Agreement where project activities require;
    b. For formulation, co-funded with interested donors.
4. For normative (research and risk management, capacity building) and field project support, at least one APO in place in each operating year.
5. Open additional funding streams –
    a. Project related – field projects.
    b. Technical co-ordination and expertise/capacity building projects.

Priorities – January 2005

1. Surveillance project funding – Iran and eastern Turkey
2. Negotiation of EC/FAO Implementing Agreement for period 2005-
3. Professional Officer (APO) – 2005 onwards
4. Formulation mission – Caucasus long term project

Appendix 12
STATEMENT 1

MTF/INT/011/MUL - TF number 904200

EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE

Financial Report as at 31 December 2004

	US$	US$
Balance as at 1 January 2004		72,791
Interest received	1,987	
Contribution from member countries (As per statement 2)	489,179	491,166
Expenditure		
Commission Secretary	192,287	
Consultant	6,652	
Admin. Support Personnel	80,362	
Contracts	50,612	
Duty Travel	50,967	
General Operating Expenses	2,124	
Expendable Equipment	2,569	
Non-Expendable Equipment	0	
Total Expenditure		-385,573
Balance as at 31 December 2004		178,384

STATEMENT 2

TRUST FUND No. 9042.00 - MTF/INT/011/MUL -
Inter-Regional - Euopean Commission for the Control of Foot-and-Mouth Disease

Status of Contributions as at 31 December 2004
(expressed in US$)

Member Governments	Outstanding 31/12/2003	Contribution due for 2004	Received up to 31/12/2004	Outstanding 31/12/2004
ALBANIA	32.59	3,000.00	3,019.59	13.00
AUSTRIA	7,803.00	9,200.00	16,986.69	16.31
BELGIUM	0.00	15,300.00	15,287.01	12.99
BULGARIA	7.74	9,200.00	9,199.52	8.22
CYPRUS	0.00	3,000.00	0.00	3,000.00
CROATIA	2,620.00	3,000.00	3,011.00	2,609.00
CZECH REPUBLIC	7.93	9,200.00	9,207.93	0.00
DENMARK	7.89	15,300.00	15,299.52	8.37
FINLAND	7.85	9,200.00	9,199.35	8.50
FRANCE	26,000.00	30,500.00	56,483.18	16.82
GERMANY	26,000.00	30,500.00	56,491.55	8.45
GREECE	3.00	9,200.00	9,193.00	10.00
HUNGARY	-7,800.00	9,200.00	10,600.00	-9,200.00
ICELAND	-2,597.00	3,000.00	0.00	403.00
IRELAND	20.00	9,200.00	9,200.00	20.00
ISRAEL	2,600.00	3,000.00	5,584.65	15.35
ITALY	12,236.58	30,500.00	41,040.80	1,695.78
LITHUANIA	7.79	3,000.00	3,002.79	5.00
LUXEMBOURG	0.00	3,000.00	3,000.00	0.00
MACEDONIA, The Former Yugoslav Rep. of	2,657.67	3,000.00	24.41	5,633.26
MALTA	0.00	3,000.00	2,986.49	13.51
NETHERLANDS	0.00	15,300.00	15,291.71	8.29
NORWAY	7,800.00	9,200.00	17,000.00	0.00
POLAND	0.00	15,300.00	15,300.00	0.00
PORTUGAL	15,600.00	9,200.00	16,109.85	8,690.15
ROMANIA	7.85	15,300.00	15,294.56	13.29
SERBIA and MONTENEGRO (ex YUG.)	10.00	9,200.00	0.00	9,210.00
SLOVENIA	29.25	3,000.00	2,986.93	42.32
SPAIN	7.73	15,300.00	15,286.86	20.87
SWEDEN	25.00	15,300.00	0.00	15,325.00
SWITZERLAND	0.00	15,300.00	15,291.44	8.56
TURKEY	0.00	15,300.00	15,300.00	0.00
UNITED KINGDOM	52,000.00	30,500.00	82,500.00	0.00
YUGOSLAVIA, Soc. Fed. Rep. of	81,511.30	0.00	0.00	81,511.30
TOTALS	226,606.17	381,700.00	489,178.83	119,127.34

STATEMENT 2

TRUST FUND No. 9042.00 - MTF/INT/011/MUL -
Inter-Regional - Euopean Commission for the Control of Foot-and-Mouth Disease

Status of Contributions as at 10 January 2005
(expressed in US$)

Member Governments	Outstanding 31/12/2004	Contribution due for 2005	Received up to 10/01/2005	Outstanding 10/01/2005
ALBANIA	13.00	3,000.00	0.00	3,013.00
AUSTRIA	16.31	9,200.00	0.00	9,216.31
BELGIUM	12.99	15,300.00	0.00	15,312.99
BULGARIA	8.22	9,200.00	0.00	9,208.22
CYPRUS	3,000.00	3,000.00	0.00	6,000.00
CROATIA	2,609.00	3,000.00	0.00	5,609.00
CZECH REPUBLIC	0.00	9,200.00	0.00	9,200.00
DENMARK	8.37	15,300.00	0.00	15,308.37
FINLAND	8.50	9,200.00	0.00	9,208.50
FRANCE	16.82	30,500.00	0.00	30,516.82
GERMANY	8.45	30,500.00	0.00	30,508.45
GREECE	10.00	9,200.00	0.00	9,210.00
HUNGARY	-9,200.00	9,200.00	0.00	0.00
ICELAND	403.00	3,000.00	0.00	3,403.00
IRELAND	20.00	9,200.00	0.00	9,220.00
ISRAEL	15.35	3,000.00	0.00	3,015.35
ITALY	1,695.78	30,500.00	0.00	32,195.78
LITHUANIA	5.00	3,000.00	0.00	3,005.00
LUXEMBOURG	0.00	3,000.00	0.00	3,000.00
MACEDONIA, The Former Yugoslav Rep. of	5,633.26	3,000.00	0.00	8,633.26
MALTA	13.51	3,000.00	0.00	3,013.51
NETHERLANDS	8.29	15,300.00	0.00	15,308.29
NORWAY	0.00	9,200.00	0.00	9,200.00
POLAND	0.00	15,300.00	0.00	15,300.00
PORTUGAL	8,690.15	9,200.00	0.00	17,890.15
ROMANIA	13.29	15,300.00	0.00	15,313.29
SERBIA and MONTENEGRO (ex YUG.)	9,210.00	9,200.00	0.00	18,410.00
SLOVENIA	42.32	3,000.00	0.00	3,042.32
SPAIN	20.87	15,300.00	0.00	15,320.87
SWEDEN	15,325.00	15,300.00	0.00	30,625.00
SWITZERLAND	8.56	15,300.00	0.00	15,308.56
TURKEY	0.00	15,300.00	0.00	15,300.00
UNITED KINGDOM	0.00	30,500.00	0.00	30,500.00
YUGOSLAVIA, Soc. Fed. Rep. of	81,511.30	0.00	0.00	81,511.30
TOTALS	119,127.34	381,700.00	0.00	500,827.34

STATEMENT 3

MTF/INT/004/MUL - TF number 909700

FOOT AND MOUTH DESEASE - EMERGENCY AID PROGRAMME

Financial Report as at 31 December 2004

	US$	US$
Balance as at 1 January 2004		40,803
Interest received		371
Expenditure		
Consultancy	0	
Duty travel	0	
Expendable Procurement	0	
Support Costs	0	
Total expenditure		0
Balance as at 31 December 2004		41,174

STATEMENT 4

MTF/INT/003/EEC - TF number 911100

FOOT AND MOUTH DISEASE

Financial Report as at 31 December 2004

	US$	US$
Balance as at 1 January 2004		999,791
Interest received	7,775	
Contribution received	0	
		7,775
Expenditure		
Consultancy	33,166	
Duty Travel	113,945	
Contracts	86,850	
General Operating Expenses	0	
Expendable Equipment	767,469	
Non-Expendable Equipment	-	
Support Costs 6% (on all items except expendable equipment)	10,304	
Less: Total Expenditure		1,011,734
Deficit as at 31 December 2004		-4,168

Appendix 13

PROPOSAL FOR REVISED BUDGET FOR TRUST FUND No. 904200 - MTF/INT/011/MUL FOR BIENNIUM 2006-2007

1. At the 35th Session, April 2003, the members agreed to contribute a budget of US $381,700 for each year of the biennium, 2004-2005.
2. In 2004, the expenditure (US$ 385,573) slightly exceeded the agreed members' contributions (US$381,700). Actual expenditure for 2004, and predicted expenditure for 2005 is shown in Table 1.
3. However, the 26% fall in the value of the dollar against the euro had major impact on the Commission's budget, with a large increase in the cost elements which are borne in euro. These include salaries, which are adjusted to the exchange rate via the post-adjustment. However despite the cost of this adjustment to the budget, the post-adjustment did not meet the change in exchange rate, being 4% less over the period 2003-2005).
4. The impact of this on the balance of the fund was offset to some extent by the payment by the UK of their outstanding contribution.
5. However, the balanced budget was achieved by a significant reduction in expenditure, and the cuts required prevented the increase agreed at the 35th Session in 2003 in use of contracts to undertake surveillance and other activities from being implemented. The budget approved at the 35th Session anticipated a small surplus in 2004 which would assist with the higher costs in 2005 associated with the EUFMD General Session.
6. However, even with the cuts continued into 2005, the projected expenditure for 2005 is US $410, 237, giving a loss over the biennium of circa US$45,000. The losses, if contributions are not revised, would increase to circa US$100,000 for 2006 and 2007, WITHOUT any increase to bring the value of contracts in line with the euro-exchange rate or inflation.
7. As a result of the depreciation of the dollar, members' contributions are actually less than in 2003 despite the agreement to increase the budget by 17% in 2003. (The 2003 budget of US$ 325,000 was equivalent to 313,700 euro, whereas the 2005 budget of US$ 381,700 is equivalent to 291,600 euro at the exchange rate on 11/1/05).
8. Therefore for those countries whose currency is the euro or whose exchange rate has kept in line with the euro, the contribution by each member state, converted to euro, has fallen considerably (e.g. from 14,766 (Cat 2 member) to 13,324 euro).
9. As agreed at the 35th Session, budget contributions should be reviewed every two years with the expectation that there would be regular and smaller increase in contributions rather than less frequent and larger increases; prior to the 35th Session, the contributions had remained the same since 1993.
10. In preparing the proposed budget, the depreciation of the dollar, plus normal inflationary growth in costs have been taken into consideration.
11. Two budgets for the 2006-7 Session have been prepared for consideration by the Executive.
12. The first budget (euro-equivalent, ZERO growth) illustrates the level of contribution required to **restore the contributions** to the equivalent EURO level at the time of the General Session in 2003. This is achieved with a budget of 482,236 USD, and the scale of contributions indicated in Table 2.
13. The second budget (euro equivalent, plus 4% annual inflation) restores the equivalence to the euro contribution level agreed in 2003, but includes a 4%[1] annual

[1] Standard figure for 2006 and 2007, used in FAO planning (MSS)

cost increase for 2006 and 2007 for inflationary increases in budget lines. This budget assumes that the services agreed at the 35th Session should be provided and, in contrast to the first budget (and the situation suffered in 2004 with decline in real terms of contributions) fully implemented. The latter is equivalent to an increase (in euro) of 2.9% over the euro-equivalent of the 2004 budget.

14. It must be noted that the proposed increase (in euro), as shown in Table 2, is only 1.45% per year (2.9% over the two year period). This is only half that of the increase of 2.9% per year over the 6 year term of the 1998-2003 budgets.
15. Therefore the proposed budget, for endorsement by the General Session, is shown in Table 1, based on restoring equivalence of the budget to that agreed at the 35th Session, plus 4% inflation. The proposed country contributions are shown in Tables 2 and 3.

Note regarding the Contracts budget line

The reasons proposed in 2003 for the increase in budget allocation for contracts were:

1. It would enable review of this contract with WRL, which has remained constant for a number of years. An increase in the contracts budget line allows the Executive Committee some flexibility in decisions on the specification of the contract and level of EUFMD support for the WRL in 2004 and 2005.

2. An increase in the Contracts budget line of US$30,000 allows the Executive Committee to commission work under contract, in response to questions or situations arising, and which are outside the terms of the implementing agreement for use of the EUFMD/EC Trust Fund.
These might include:

a. Contracts to supply FMDV samples to the WRL and FMD epidemiological information from under represented parts of the world.
b. Commissioning of specific reviews, preparation of evidence based guidelines, position papers that will guide EUFMD activities and forward planning.
c. Commission services that improve information provision to members; such as website and information service (as recommended by the Executive Committee, 67th Session), and development of web-site service.
d. Production of a "Jubilee"Compendium of EUFMD Research group technical papers.

Note regarding Country contributions 1998-2003, and proposed contributions 2004-2005

These are shown in Table 2 and 3.

1. The categorisation of countries used for contributions has been that agreed by the 32nd Session, based on ruminant and pig livestock population, and the Member State contribution to FAO. The 32nd Session in 1997 recommended that the Annual proposed that the Categorisation of countries be reviewed every 6 years.
2. No change to the categorisation of countries has been proposed by Members. The increase to contributions below has therefore been made pro rata.

TABLE 1.
EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE (EUFMD)

TRUST FUND 904200 MTF/INT/011/MUL

2006 and 2007 budgets for approval by 71st Executive and by 36th Session

Budget for 2004 is actual expenditure, for 2005 is predicted expenditure.

	2004	*2005*	*2006*	*2007*	*2006*	*2007*
	Real $US	Pred. $US	$US	$US	*Euro*[1]	*euro*
Secret.	192,287	209,220	217,589	226,292	*166,225*	*172,874*
Temp. Assist.	6,652	6,918	15,600	16,224	*11,917*	*12,394*
Admin assist.	80,362	83,576	86,920	90,396	*66,401*	*69,058*
Contracts	50,612	52,636	85,405	88,821	*65,245*	*67,854*
Duty Travel	50,967	53,006	66,967	69,646	*51,159*	*53,205*
GOE	2,124	2,209	2,791	7,000	*2,132*	*5,348*
Expend equip.	2,569	2,672	3,375	3,510	*2,579*	*2,682*
Non-exp. Equipment	0	2,000	2,000	2,000	*1,528*	*1,528*
	385,573	410,237	480,647	503,890	365,658[2]	383,415

[1] at the exchange rate of 11/1/05 of 1.309 USD/euro

[2] for comparison, the budget of 381,700 USD for 2004-5, agreed at the 35th Session in 2003 was equivalent to euro 368,401 using the exchange rate in operation when budgets were prepared

TABLE 2. Proposed revision in relation to historic levels of contribution, expressed in US$ (top) and euro (below), using exchange rate of 1/1/03 and 11/1/05

Contribution Category	*$ Annual Contributions, 2002 & 2003*	*Annual Contributions 2004-2005*	ZERO-growth *Adjusted to counter dollar depreciation*	4% inflation, PLUS adjusted for USD depreciation
1	US$ 26000	30500	38,533	39,650
2	13000	15300	19,330	19,890
3	7800	9200	11,623	11,960
4	2600	3000	3,790	3,900
TOTAL (US$)			**482,236**	**496,210**
EURO equivalence		euro at 1/1/03	euro at 11/1/05	
1	euro	29,437	29,437	30,290
2		14,767	14,767	15,195
3		8,879	8,879	9,137
4		2,895	2,895	2,979
TOTAL (euro)		**368,401**		**379,076**

TABLE 3.

MEMBER COUNTRY	LEVEL	$ ANNUAL CONTRIBUTIONS, 2002 & 2003	PROPOSED ANNUAL CONTRIBUTIONS 2004-2005	ANNUAL CONTRIBUTIONS 2006-2007[1]
ALBANIA	4	2,600.00	3,000.00	3,900
AUSTRIA	3	7,800.00	9,200.00	11,960
BELGIUM	2	13,000.00	15,300.00	19,890
BULGARIA	3	7,800.00	9,200.00	11,960
CYPRUS	4	2,600.00	3,000.00	3,900
CROATIA	4	2,600.00	3,000.00	3,900
CZECH REPUBLIC	3	7,800.00	9,200.00	11,960
DENMARK	2	13,000.00	15,300.00	19,890
FINLAND	3	7,800.00	9,200.00	11,960
FRANCE	1	26,000.00	30,500.00	39,650
GERMANY	1	26,000.00	30,500.00	39,650
GREECE	3	7,800.00	9,200.00	11,960
HUNGARY	3	7,800.00	9,200.00	11,960
ICELAND	4	2,600.00	3,000.00	3,900

IRELAND	3	7,800.00	9,200.00	11,960
ISRAEL	4	2,600.00	3,000.00	3,900
ITALY	1	26,000.00	30,500.00	39,650
LITHUANIA	4	2,600.00	3,000.00	3,900
LUXEMBOURG	4	2,600.00	3,000.00	3,900
FYROM	4	2,600.00	3,000.00	3,900
MALTA	4	2,600.00	3,000.00	3,900
NETHERLANDS	2	13,000.00	15,300.00	19,890
NORWAY	3	7,800.00	9,200.00	11,960
POLAND	2	13,000.00	15,300.00	19,890
PORTUGAL	3	7,800.00	9,200.00	11,960
ROMANIA	2	13,000.00	15,300.00	19,890
SERBIA AND MONTENEGRO	3	7,800.00	9,200.00	11,960
SLOVENIA	4	2,600.00	3,000.00	3,900
SPAIN	2	13,000.00	15,300.00	19,890
SWEDEN	2	13,000.00	15,300.00	19,890
SWITZERLAND	2	13,000.00	15,300.00	19,890
TURKEY	2	13,000.00	15,300.00	19,890
UNITED KINGDOM	1	26,000.00	30,500.00	39,650
TOTAL		**325,000.00**	**381,700.00**	**496,210.00**

[1] based on 4% growth PLUS USD/euro adjustment

Appendix 14

Profile for a Candidate Member of the Research Group (RG) of the Standing Technical Committee of the FAO European Commission for the Control of FMD (EUFMD)

Taking into account the Terms of Reference (ToR) of the RG being:

1. To provide technical guidance to the Executive Committee of the EUFMD Commission, and thereby to the member states and wider international community,
2. To identify technical gaps relating to FMD control that should be brought to the attention of the Executive Committee, and/or the member states,
3. To assist in the maintenance of expertise on all aspects of FMD control, and taking into account the 'Most significant technical questions' raised by the 'Feedback Group - European State Veterinary Services' at the RG meeting in Crete, Greece – 2004, a Candidate Member (CM) of the RG should be an internationally recognised Expert in at least one of the following FMD domains:

Global Surveillance	Vaccine production
Post Vaccination Surveillance	Vaccine performance testing
Field Epidemiology	Vaccine development
Simulation exercise	Legal aspects on vaccine use
Risk assessment	Infective/Vaccination Immunology
Modelling of FMD outbreaks	Laboratory Diagnosis
Disease Control	Molecular epidemiology
	Antigen profiling
	Test validation
	Test development
	Pathogenecity and pathology
	Animal experiments
	Virus inactivation in animal products
	Desinfection
	(Laboratory) Contigency plans
	Biosecurity
	Sample Transport

The CM should be highly committed to the RG and therefore the CM should work in an environment that allows to at least maintain the expertise and to make this expertise available to the RG. The CM should have a network of contacts allowing the RG to make significant progress. The CM should be familiar with the work of the FAO, OIE and EC. The CM must be willing and capable of performing at least one of the following: FAO missions, organising workshops/trainings, lead a Working Group, international research project management. The CM must have good communication skills and must speak/read/write English well. Speaking and reading Russian is considered as an advantage.

Proposed Experts as Candidate Members for the RG 2005-2007:

1. Sinan Aktas
2. Soren Alexanderson
3. Emiliana Brocchi
4. Mark Bronsvoort
5. Kris De Clercq
6. Aldo Dekker
7. Georgi Georgev
8. Matthias Greiner
9. Bernd Haas
10. François Moutou
11. Donal Sammin
12. Hagai Yadin

- WRL: David Paton
- CRL

Mark Bronsvoort	Aldo Dekker	Sinan Aktas
Matthias Greiner	Donal Sammin	Soren Alexanderson
François Moutou	Hagai Yadin	Emiliana Brocchi
	WRL	Kris De Clercq
	CRL	Bernd Haas

Appendix 15

TO: Mr. K. Sumption
Secretary, European Foot-and-Mouth Disease Commission

DATE: 4 October 2004

FROM: Giuliano Pucci
Legal Counsel

SUBJECT: Amendments to the Constitution of the EUFMD Commission

I refer to your message of 2 September 2004 seeking our views on the procedures for amending the Constitution of the European Commission for the Control of Foot-and-Mouth Disease, in particular as concerns the attendance at the sessions of the Executive Committee. Further to the meeting you had with J-P. Chiaradia-Bousquet, of our office, we understand that your query arises from difficulties in reaching a quorum in case the elected "*delegates*" are not able to attend the session of the Executive Committee.

As you are aware, the procedures for amending the Constitution of the Commission are provided for in its Article XIV. Such procedures are quite precise and lengthy as any proposed amendment shall be examined by the Commission, the Committee on Constitutional and Legal Matters and finally by the Council of FAO before it definitively enters into force.

On analyzing the difficulties mentioned in your message, we came to the (provisional) conclusion that they might be resolved without resorting to amendment of the Constitution, through the less difficult adoption (by the Commission) of specific Rules.

1. Interpretation of the word "*vacancy*" in Article X.3 of the Constitution

Article X.3 of the Constitution provides that:

> "*If a vacancy occurs in the Executive Committee before the expiration of the term of appointment, the Committee may request a Member of the Commission to appoint a representative to fill the vacancy for the remainder of the term.*"

Consequently, if it is considered that the unavailability of a delegate to attend a session of the Executive Committee results in a "*vacancy*", then, pursuant to the above Article X.3, the Committee "*...may request...*" a Member (i.e. a country) to appoint a representative who will replace the absent delegate. In this case, the "Member" so requested could be either the Member whose delegate is not available, or another Member. Taking into account that the Commission shall convene a regular session at least every two years (Article VII.4) and that the Executive Committee "*shall meet at least twice between any two successive regular sessions of the Commission*" (Article X.4), the Executive Committee might be in a position to request in due time the appointment of such "new member(s)".

2. Interpretation of the word "*delegate*" in Article X.1 of the Constitution

Article X.1 of the Constitution provides that the Executive Committee is composed of the Chairman, two Vice-Chairmen of the Commission and five delegates, i.e. 8 Members.

Article VI.1 stipulates that "*Each Member shall be represented at Sessions of the Commission by a single delegate who may be accompanied by an alternate and by experts and advisers...*"

If the word "*delegate*" is understood as "*one of the officials constituting the delegation of a Member*", then, pursuant to Article VIII of the Constitution, the Commission could adopt a new Rule along the following lines:

> "*Under the terms of Article VI.1 and Article X.1 of the Constitution, a delegate who has been selected by the Commission to be one of the members of the Executive Committee and who is not able to attend a session of this Committee may be replaced by an alternate in the sens of Article VI.1 of the Constitution, provided that such alternate furnishes to the Executive Committee a document issued by the competent authority of the Member he represents indicating that such alternate shall replace the delegate not able to attend the session.*"

As this Rule does not contain financial implications, it only requires only the approval of the Director-General.

Appendix 16

THIRTY-SIXTH SESSION OF THE EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE

Rome, Italy, 27-29 April 2005

PROVISIONAL AGENDA

1. Opening of the Session

2. Adoption of the Agenda

3. Overview of FMD situation in Europe and in other regions

4. Report of the Executive Committee on the Commission's activities during the past biennium

5. Plan of Action for the EUFMD Commission for the next 4 years (2005-2008)

6. European involvement in the global surveillance for FMD
   - i) The role of the World Reference Laboratory, Pirbright
   - ii) Plan of action, 2005-2008

7. Progress towards FMD freedom in Europe
   - i) FMD situation in Turkey – current situation and future outlook
   - ii) FMD control in Trans-Caucasus region
   - iii) FMD control in neighbouring region
   - iv) Strategy and plans, 2005-2008

8. Addressing technical constraints to application of FMD control policy; report of the Standing Technical Committee of the EUFMD Commission
   - i) Report for the past biennium
   - ii) Priorities and plan of action, 2005-2006

9. European FMD expertise and technical capacity – situation critical?
   - i. Situation overview
   - ii. Proposal for action in this area in period 2005-2008

Specific Technical Items

10. FMD vaccine situation in the European region
    - i) Stocks held

ii) Future outlook

11. Emergency vaccination in FMD-free countries - what issues are resolved –and which remain?

12. Bio-containment and bio-security
    i) Paper for adoption on biosecurity standards for FMD sero-diagnostic laboratories

Constitution and Procedures, Finances, Committees

13. Financial matters: accounts 2003 and 2004 and proposed budget for 2006 and 2007

14. Rules of Procedure - proposed changes
    i) Election of Chairman, Vice-Chairmen, members of the Executive Committee and members of the Research Group

15. Any other business

16. Adoption of the Draft Report of the 36th Session

17. Closing of the Session

Appendix 17

Recommendations

Of the International Conference on the material and immaterial costs of animal disease control

Brussels, 15& 16 December 2004

1. The measures taken to control outbreaks of major epidemic animal diseases should take into account epidemiological as well as economic and social factors.

2. Socially accepted control of major epidemic animal diseases needs a strong involvement of external stakeholders in the policy process.

3. Increased awareness and good surveillance are fundamental to ensure early detection and rapid control of disease.

4. In view of the enormous consequences of major epidemic animal disease outbreaks, the Community as well as individual Member States should provide more support to the control of these diseases outside the EU.

5. Import controls, concerning illegal introduction in the EU of live animals or animal products by travellers, should get renewed attention.

6. All keepers of animals and related stakeholders (transport, trade) should be stimulated to take their responsibility as regards the prevention and control of the spread of major epidemic animal diseases.

7. One of the starting points of control strategies for major epidemic animal diseases should be to limit, to the extent possible, the killing and destruction of healthy animals.

8. Vaccination should be accepted as one of the regular options for the control of animal disease outbreaks.

9. In case of vaccination adequate surveillance should be implemented to ensure that possible circulation of the disease agent is rapidly detected.

10. All stakeholders involved should take their responsibility in solving the problems related to the trade of products of vaccinated animals.

11. The aim should be that products from vaccinated animals are not discriminated by distinctive labelling or marking.

12. Differentiated disease control measures may be appropriate for animals not kept for commercial purposes and other special categories.

13. Industry and authorities should work together for the development and the licensing of new vaccines and diagnostic tests designed for specific (strategic) purposes.

14. Producers should bear more responsibility for the financial aspects of the control of epidemic and animal diseases.

15. Differences between Member States in their approach towards the financing of animal disease costs and losses should not lead to distortion of competition.

16. The EU should stimulate the establishment of insurance schemes, private or public/private funds to face animal disease financial risks, while continuing to ensure financial support for the implementation of Community measures for disease control.

Appendix 18

LIST OF PARTICIPANTS

71st Session of the Executive Committee
of the European Commission for the Control of
Foot-and-Mouth Disease
Pakistan Room, FAO HQs, Rome, 24&25 January 2005

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