The Development of a Global Record of Fishing Vessels: Conceptual Structure and Governance Arrangements

Prepared by

for

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Final

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Acronyms

COFI	Committee on Fisheries
EMSA	European Maritime Safety Agency
FAO	The Food and Agriculture Organisation of the United Nations
GR	Global Record
GT	Gross Tons
HSTF	High Seas Task Force
IT	Information Technology
IPP	International Phytosanitary Portal
IRCA	The International Register of Civil Aircraft
ITF	International Transport Workers' Federation
IUU	Illegal, Unreported and Unregulated
KIS	Keep It Simple
MCS	Monitoring Control and Surveillance
NGO	Non-governmental organisation
OECD	Organisation of Economic Co-operation and Development
RFMO	Regional Fisheries Management Organisation
UN	United Nations
UNEP	United Nations Environment Programme
UNGA	United Nations General Assembly
UVI	Unique Vessel Identifier

1. Introduction and Background

Given recognition of the potentially positive impacts of a Global Record (GR) of fishing vessels, a number of preliminary and investigative initiatives have been completed with regards to its creation, as detailed in **Appendix 1**. As yet however, there has been no determination on what the GR would look like it in terms of its conceptual structure, or on who should run it and how it would be managed (i.e. its governance).

Following this short introduction, Section 2 of this report considers a conceptual structure for a GR based on some key assumptions, some variables requiring further consideration, and some lessons learned from case studies of similar types of global information portals.

Section 3 then examines various principles of best practice for governing projects of this nature. These principles of best governance practice inform possible governance arrangements for the GR presented in Section 4.

Section 5 provides some conclusions, and highlights the fact that given the current lack of determination on both the conceptual structure and the governance arrangement for the GR referred to above, a number of conceptual and governance issues require further work and agreement.

This report is underpinned by a number of important assumptions, namely that:

- Illegal, unreported and unregulated (IUU) fishing is a significant global problem;
- a GR could potentially contribute to reducing IUU;
- a GR will receive political support;
- COFI will provide a mandate for its development; and
- the conceptual structure and governance arrangements for a GR should be based on principles of best practice and on lessons learned from other similar projects.

2. A conceptual structure for the Global Record

A number of key assumptions underpin the conceptual structure for the GR. They are:

- Recognition of the fact that with estimates of 1.3 million decked vessels in the world's fishing fleet, and about 2.8 million un-decked vessels, those responsible for the management/running of the GR can not be expected to input data on vessels themselves, even if a careful phasing of the GR's implementation is used[1]. This means that they must rely on, and have links to, data already entered by others, with data providers having the responsibility for setting up registers, which would be the main basis for data provided to the GR.
- The need for a GR to be based on a unique vessel identifier (UVI) for those vessels included. Because the name of a vessel can change with a change of owner or through a demise charter and or change of flag, a more unique form of identification that does not change with age, flag, name or ownership, will be necessary for each vessel.
- Clear guidelines and a framework for a set of minimum requirements for registers with regards to the format and types of information/data to be held, and data provision protocols.
- That the GR should be a web-based tool in the public domain (even if charges and different levels of access for different users may be appropriate); and
- The fact that the GR should be a 'record' and not a 'register'. This important distinction is based on the fact that a record is akin to a database, while a registry accords legal personality to a vessel.

In addition to these key assumptions, there are a number of issues which require further consideration. These are provided in the left-hand column of the following table, with some comments and ideas on each issue provided alongside in the right-hand column.

Table 1: Further considerations for the GR

Should the GR…	**Some thoughts…**
Be mandatory and based on a binding legal instrument or voluntary?	Both approaches run the risk of States with high numbers of vessels engaged in IUU not providing information/data, either through not joining as a Contracting Party (if binding) or by not providing data if voluntary.
Collate greater or lesser amounts of information on each vessel from registries? i.e. should the GR necessarily include all information contained in national registries?	To be agreed, but should be based on Annex in FAO Expert Consultation, and adapted if necessary to user requirements i.e. user-driven design (e.g. input from MCS User Requirements Correspondence Group). Data to be included must be clearly justified on the basis of what is effective and required on a 'need to have' basis, rather than a 'nice-to-have' basis.
Be free to users, or should users be expected to pay?	The principle of cost recovery should be supported, although it may be appropriate to phase this in only once the GR is well established to maximise its value-added to users. Cost recovery could be achieved through a variety of measures such as user payments, advertising on the GR website, etc
Direct users to relevant web-links on other sites/registers, or provide a search function on the portal itself providing data based on information drawn down from	A searchable function would add real value, whereas a GR just directing users to other websites would be cumbersome and less used friendly.

[1] Lloyds FairPlay have only 130,000 vessels and around 60-70 people doing cross-checks and data verification

Should the GR…	Some thoughts…
other sites/registers?	
Store data provided by others (on a periodic basis) and provide searches on that, or provide a search function of data held by data providers?	Requires further IT research and input (e.g. by IT Correspondence Group)
Allow for data to downloadable/saved in different data formats?	Data should be able to be saved by users in a commonly used and friendly format e.g. Microsoft word/excel
Be available in more than one language?	Data should be available in FAO official or working languages
Provide other relevant information and links to other relevant organisations, or only a searchable function of the GR?	Additional links and data/information could be provided to add further value, but care should be taken to ensure that the home page of the GR remains clear, uncluttered and focuses on the search tool. The searchable function based on the GR database should adhere to the principle of KIS in terms of data content. Other data sources such as on Port State controls, and information on IUU fishing should be available through links provided on the GR, but should not be a primary data source for the database underpinning the GR – to do so would run the risk of over-complicating the establishment of the GR
Provide greater transparency information on which countries are providing data?	Yes, as transparency could further encourage information provision
Obtain data only from national registries only, or from other potential providers?	Advantageous to engage with wide range of providers to add increased value e.g. Lloyds FairPlay, RFMOs, etc
Make public all the data/information contained on each vessel in the national/regional registry?	More legal work required on this issue. Possible to consider different levels of access to data for different stakeholders e.g. MCS authorities, public, etc

In seeking to inform discussion about an appropriate conceptual structure for a GR, a number of case studies with features similar to the GR have been reviewed, to learn some lessons that may be useful in informing the conceptual structure of the GR. The case studies are[2]:

1. Equasis[3], which collates and makes public on the internet existing safety-related information on ships throughout the world.
2. The European Community fleet register, which is an internet-based database where all the fishing vessels flying the flag of a Member State have to be registered in accordance with Community legislation[4].
3. The International Phytosanitary Portal, an FAO-run system, which provides information of a global nature on the web on the spread and introduction of pests of plants and plant products, as well as more general information of interest to the phytosanitary community[5].
4. The International Register of Civil Aircraft (IRCA), which provides an international database of national aircraft fleets in one common format, based on national registers of various countries. The IRCA is web-based[6].

2 Other portals considered but not reviewed in detail, but which nevertheless have some relevance and have informed this paper include a) Lloyds register/Fairplay http://www.ships-register.com/ b) GCFM data base http://www.gfcm.org/gfcm/topic/16163 c) Greenpeace blacklist http://blacklist.greenpeace.org/ d) the Integrated Taxonomic Information System http://www.itis.gov/ and e) The IUCN Red List http://www.iucnredlist.org/

[3] http://www.equasis.org/EquasisWeb/public/HomePage

[4] http://ec.europa.eu/fisheries/fleet/index.cfm

[5] https://www.ippc.int/IPP/En/default.jsp

[6] http://www.aviation-register.com

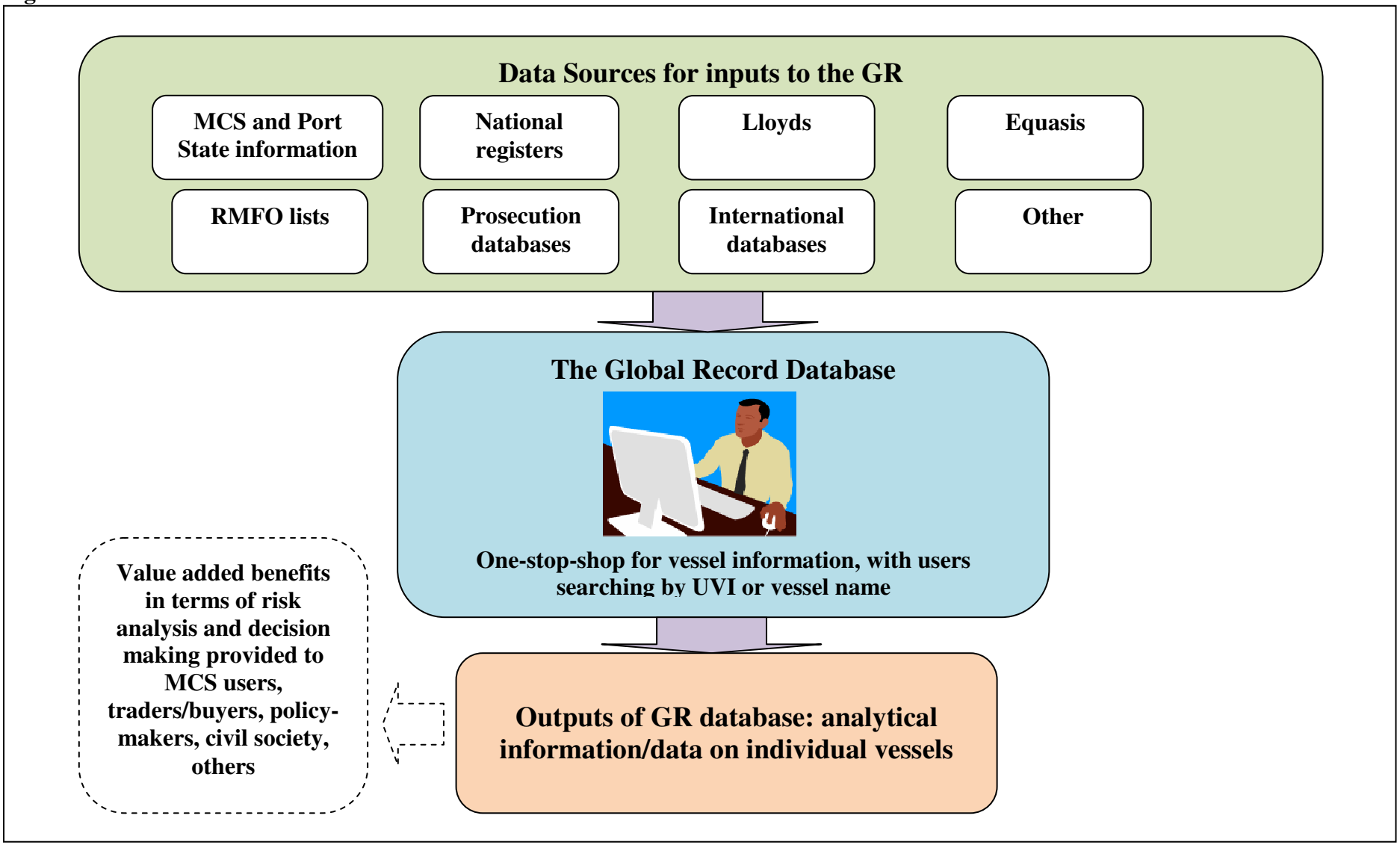
A detailed discussion is provided in **Appendix 4** for each of these case studies on their conceptual structure (and also on their governance arrangements). Based on **Appendix 4** and communication with those running these schemes, a number of important lessons learned can be drawn, which have relevance to the GR.

Key conceptual lessons from the case studies are that:

- Free and open access is important, but is usefully underpinned by a registration process to generate information on users;
- Web-based portals should enable search functions by users, with resulting information displayed on the portal itself, rather than just providing links to other lists/registries; This ensures that the global portal 'adds value' to the information provided by providers;
- The portal can add further value by providing additional information content and other useful web-links that may be required by users;
- The front-end web-site available for users must be carefully designed so as to be user-friendly and easily accessible, and it must be kept simple;
- Those managing the portals should not themselves be entering data, but rather data should be pulled in from as wide a variety of sources as possible. Data should be automatically linked between the portal and providers, rather than requiring providers to submit data to the portal;
- A critical issue in ensuring high quality data provision is ensuring as much online help as possible (on what data should be submitted, when, and how) through user manuals/guidelines;
- Cost recovery at some future stage with users being required to pay a fee for searches can be possible and should be considered in the system design.

Bearing in mind the key assumptions underpinning the GR, the issues still requiring further consideration, and the key lessons from the case studies as bulleted above, a conceptual structure for the GR is presented in the diagramme below. The diagramme shows that UVIs could be allocated either by national organisations/registries, or by other relevant organisations, with the GR pulling in data on vessels from these sources. Where RFMO lists or sub-regional registries exist based on UVI information from national registers or other sources, they could also be a source of data for the GR. The GR would provide a search function to allow information on individual vessels to be provided to users, and the GR would also provide links to other relevant websites and information sources e.g. on IUU, MCS reports, etc.

Figure 1: Possible structure for a web-based Global Record



Source: Poseidon

3. Best practice and key principles of project governance

If a GR is to be established and run effectively, there are a number of important governance principles and issues of best practice which should underpin its development and operation. Literature on project successes and failures suggests that poor project governance is a common cause of project failure[7], because it can prevent timely decision-making, result in a lack of clarity over who has responsibility for different tasks and outputs thereby confusing roles and responsibilities, and preclude appropriate levels of stakeholder involvement (important both in terms of demonstrating transparency and accountability, but also in terms of receiving stakeholder feedback and generating stakeholder 'buy-in').

Having a principles-based project governance policy that defines a structured approach to project governance can thus help to ensure project success. This section therefore suggests four key principles designed to avoid the common failures associated with ineffective project governance.

Key Principle 1*: Clearly articulate the division of authority, roles, responsibilities and accountability separately for a) those responsible for overall supervision/governance, and b) those responsible for project implementation.*
Those involved with overall governance need not/should not be involved in all day to day decisions, but they need to know for what they are accountable and responsible. These responsibilities should include reviewing and guiding project strategy, major plans of action, risk policy, annual budgets and expenditure; setting performance objectives and monitoring project performance; and selecting, monitoring and where necessary, replacing key project staff.

Accountability can not be shared, and there must be a single point of accountability within the project development and management team for overall project success. This determines who is driving the project forward and who is empowered to make key project decisions. Without a single point of accountability, the project is likely to lack clear authority because the validity of any decision is questionable since the authority that lies behind that decision has not been established. This can be particularly noticeable during project initiation, where rather than the project being driven by one person with the necessary authority it is forced to generate its own momentum by building consensus and support. But equally, if accountability is to be assigned, then the recipient of that accountability must be supported by an appropriate level of resources (financial and human), and unhindered by unnecessary bureaucratic procedures reducing the ability act.

Key Principle 2: *Ensure the transparent, timely and accurate disclosure on all material matters, including the financial situation, performance, and governance.*
Systems and reporting frameworks must be put in place to ensure transparency in all project matters. Transparency helps to assist with stakeholder involvement (see below) and therefore support, as well as equality in the treatment of all stakeholders. A good first step is an annual report that provides information on the project's governance, its mission, activities completed

[7] Text in this section draws on and merges ideas contained in the 'OECD principles of corporate governance' (2004), and a paper by Ross Garland entitled 'Developing a Project Governance Framework' (date unknown). Text drawn from these two publications is not therefore referenced in each case, but the authors acknowledge their importance and that some text has been directly used without the use of parentheses. The key principles are also based on Macfadyen (2008).

and planned, performance against stated indicators, and relevant financial information (i.e. a breakdown of income and expenditure)

Key Principle 3: *Facilitate appropriate stakeholder involvement to ensure that project governance is service delivery focussed, while at the same time addressing stakeholder consultation and project decision-making separately.*
Project decisions must be appropriately informed by stakeholder participation and be stakeholder-led, rather than provider-led. Failure to do so can quickly result in information technology developments becoming less relevant/useful to the needs of final users. Stakeholder consultation and feedback must therefore be part of both project development and implementation.

However, stakeholder consultation and project decision-making are two separate functions and must be addressed separately. When the two are confused, decision making forums can become clogged with stakeholders resulting in labored decision making. While many people may need to be aware of a project and have an input into shaping it, not everyone needs to participate in each critical project decision. Achieving this critical separation reduces the number of persons required in project decision forums, while maintaining the essential input provided by key stakeholders.

Key Principle 4: *Provide for evaluation points at which the overall project is reviewed*
Monitoring indicators can be used for the continuous or periodic measuring of the extent to which the activities specified in a project plan are being successfully completed. However, the overall governance framework must also provide for a broader evaluation to measure results to form the basis for any project re-design. Such evaluations should take place at suitable intervals[8], and should focus on:

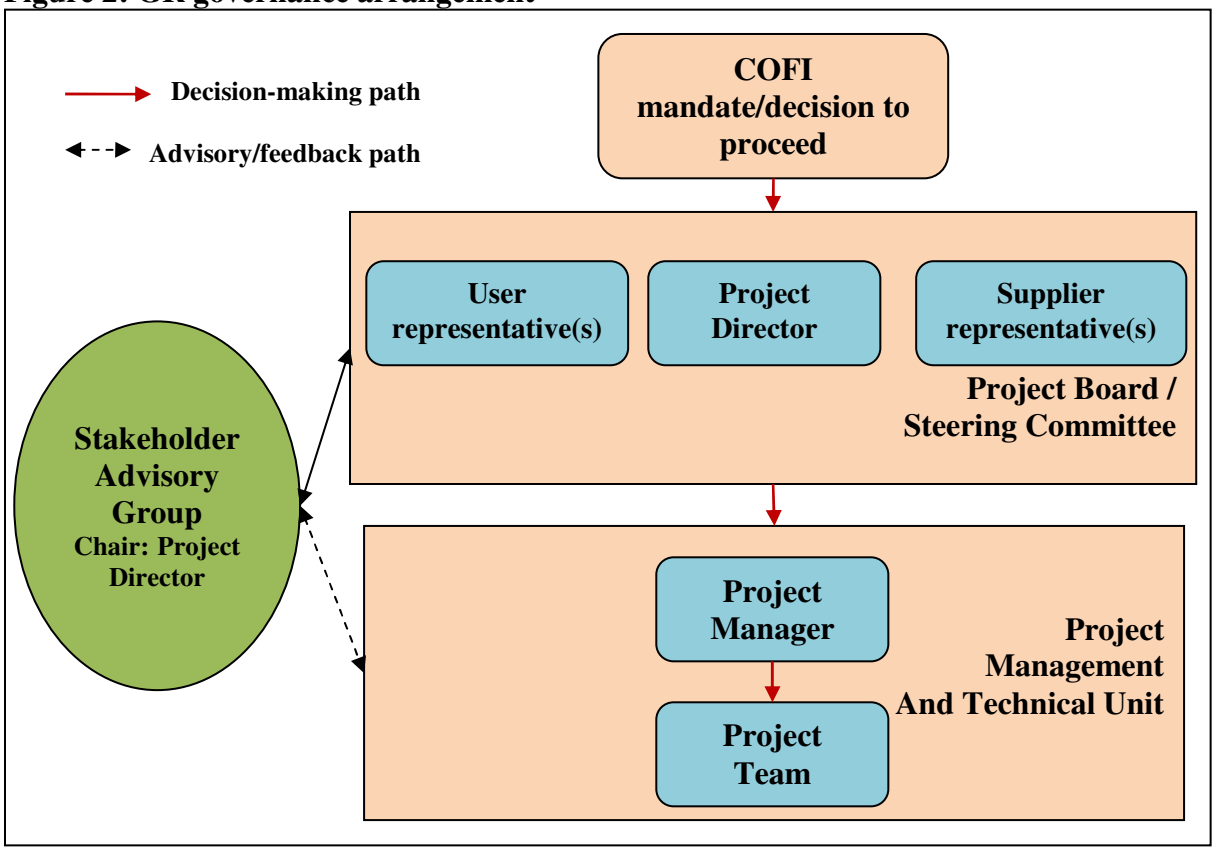
- Efficiency/value for money (assessing the outputs in relation to inputs, looking at costs, implementing time, and economic and financial results);
- Effectiveness (measuring the extent to which the objectives have been achieved or the likelihood that they will be achieved);
- Impact (measuring both the positive and negative, foreseen and unforeseen, changes to and effects on society caused by the project);
- Relevance and coherence (assessing the extent to which the project satisfies the needs of the various interest groups, and gauging the degree to which the project is justified and fits within, and complements/duplicates global, national and local policies, priorities and projects); and
- Sustainability (measuring the extent to which the benefits from the project are likely to continue after phases of funding have been completed).

[8] typically every 3-5 years

4. Potential governance arrangement for the Global Record

Building on the four key governance principles outlined in the previous section, and the review of the governance arrangements for the case studies detailed in **Appendix 4**, a governance arrangement for the GR is suggested below in **Figure 2**.

Figure 2: GR governance arrangement



Source: Poseidon, adapted from Garland

Some explanatory notes on this proposed governance arrangement, and the roles and responsibilities of those portrayed in **Figure 2** are:

- COFI will be responsible for providing a broad mandate that the project should go-ahead subject to the provision of adequate financing. After this decision is made, it is expected that COFI would provide periodic approval for the overall 'business case' for the GR, and/or any substantive changes to it i.e. after periodic evaluations (say every 3-5 years) and based on bi-annual progress reports (*see Key Principle 4 in Section 3*);
- The Project Board (or Steering Committee) is comprised of a Project Director, User representatives, and Supplier representatives. Successful projects maintain a close relationship between the users and the suppliers and this is reflected in their membership of the Project Board (*see Key Principle 3 in Section 3*)[9];
- The project governance structure will only be as strong as the Project Board, and to be effective it needs to be comprised of the right high calibre people who understand projects and who are empowered to make decisions. Without this, the Project Board

[9] Note that in the case of the GR individuals from different parts of the same national government may need to assume these differing roles i.e. those running registers would be suppliers, while those running MCS operations would be users.

will lack authority and project decision making will be poor. Thus at the Project Board level all participants would have senior project and business experience as this is the key governance, oversight and decision making forum;

- The User representative(s) in the Project Board represent the end users of the delivered service and promotes their concerns and interests. The Supplier representative(s) are one or more senior representatives of the project's key data/information suppliers (i.e. national registers, RFMOs[10], other registers/lists (e.g. Lloyds FairPlay)) and provide their perspective and expertise (*see Key Principle 3 in Section 3*);
- There may be more than one user representative and more than one supplier representative on the Project Board, but only be one Project Director since project accountability cannot be shared (*see Key Principle 1 in Section 3*). The Board should be comprised of around 6-8 people, so as to maintain decision-making efficiency;
- Accountability for the success of the project will sit with the Project Director (*see Key Principle 1 in Section 3*), who will chair the Project Board and the Stakeholder Advisory Group. He/She will undertake day to day management and decisions and also have project budget responsibility since responsibility for a budget implies responsibility for what the budget is spent on;
- The Project Manager and his/her team will make the vast majority of project decisions, with the remainder being made at the Project Board level. These Board-level decisions will be around key project documents and decisions, such as approving the Project Plan, approving annual plans submitted by the Project Manager, and so on. Issues that the Project Manager is unable to resolve will also be addressed by the Project Board. The Project Manager will responsible for transparent reporting on all activities (*See Section 2 Key Principle 3*);
- The Stakeholder Advisory Group represents key stakeholders who have valid interests in the project yet are not sufficiently central to the project's success to warrant a seat on the Project Board. This Group allows for wider stakeholder feedback than is possible within the Project Board, given the need for the latter to be small enough to make decisions effectively. The Stakeholder Advisory Group could be composed of sub-stakeholder group representatives (e.g. by region) if necessary (*see Key Principle 3 in Section 3*);
- The Stakeholder Advisory Group on the one hand, and the decision making forums (Project Board and Project Management and Technical Unit) on the other, are kept separate to ensure that the latter are an efficient size;
- A key feature of the proposed arrangement is the distinction between decision-making paths, and advisory/feedback paths.
- The structure should ideally be completely separate to that of the organisation hosting/managing the GR i.e. while that organisation may input to the Stakeholder Working Group, the decision-making path is through the Project Board, not the organisation within which the Management and Technical Unit might sit (*see Key Principle 1 in Section 3*)[11];

[10] RFMOs are reliant on national data suppliers, and may also therefore be users. But senior suppliers will need to contain strong regional representation (i.e. RFMOs) to identify issues and to assist with incentivisation for national registers to support the GR

[11] Note that the separation of project governance from the governance of the organization hosting the management unit may be difficult. An example is approval of a Project Plan which you would think implies approval of project resourcing since it is an integral part of that plan. However, most organisations have detailed approval processes for the hiring of staff and contractors and may have difficulty aligning them with a project's

In addition to the overall governance arrangement suggested above, a range of governance options are possible for the management of GR on a day-to-day basis, each with different features, strengths and weaknesses. Four possible options for the Project Management and Technical Unit are as follows, and each one needs to be considered in terms of associated strengths and weaknesses with respect to issues such as: costs; bureaucracy; technical competency/skills; management competency/skills; mandate; potential to generate buy in; ability to generate appropriate funds.

Table 2: Governance options for GR Management Unit

Governance Options for Management Unit	Strengths	Weaknesses
Option 1: Hosted by/within FAO[12]	• Good fisheries technical competence • Global fisheries mandate • Ability to generate buy-in from Member States • Institutional existence guaranteed • Could be underpinned by binding instrument if that conceptual option is preferred • Ability for in-kind contributions • Neutral	• Organisation bureaucracy • Cost implications?
Option 2: Run by a not-for profit independent organisation/association with a mandate which includes MCS/IUU issues (e.g. RFMO, MCS network)	• Good fisheries technical competence • Likely to be more demand/user than provider driven • Ability for in-kind contributions	• Institution itself might be still developing (e.g. MCS network) • Confusion with other dual/tripartite mandates • May not be seen as impartial • May not be seen as having a global mandate
Option 3: Hosted by/within a national administration	• Ability for in-kind contributions • May have good technical competence (if the right institution)	• May not be seen as impartial or bound by its own organizational rules • May not be seen as having a global mandate • May have inadequate resources

approval under its governance structure. Likewise, the choice/use of particular IT software may be problematic if the organization hosting a Management Unit insists on the use of existing software.

[12] Note that under this option there could be different levels of integration with FAO's administration. For example the PMTU could fall completely under FAO's administration with it effectively being an organ of FAO, or it could just be hosted in FAO's premises ensuring FAO support, collaboration and credibility, while retaining a degree of autonomy.

Governance Options for Management Unit	Strengths	Weaknesses
Option 4: Outsourced to a private company and run as a discrete part of the project, reporting to the Advisory Board (of which FAO would be a key member)	• Potential cost efficiencies • Fewer organizational and bureaucratic constraints • FAO presence on Board/supervision could help support global mandate, provide and appropriate networking/advocacy and buy-in, and underpin activities by binding instrument if that conceptual option is preferred	• Risks of company ceasing to trade • Lack of long-term horizon/buy-in by company • Risks of successful bidding company not necessarily having the requisite skills and management capability, despite claims in any proposals made. • neutrality and credibility

An important aspect with regards to the options presented in Table 2 is that the governance arrangement with respect to day-to-day management may need to be different in the short- and long-term. Thus a decision could be made, for example, to proceed with Option 1 or 3 in the short- to medium-term (e.g. 5 years), before switching to Option 2 or 4 thereafter. A switch in governance option may be necessitated by a change in funding status i.e. donor/NGO funds available only for a limited period during project start up, followed by a requirement for a more commercial approach once donor/NGO funds are phased out.

5. Conclusion

The development of a Global Record (GR) of fishing vessels has the potential to contribute to efforts to reduce illegal, unreported and unregulated (IUU) fishing, and to generate other positive impacts through its ability to inform both fisheries policy and management, and market-based traceability initiatives.

While noting that no decision has yet been made as to whether to proceed with its development, this paper explores a possible conceptual structure and governance arrangement for a GR.

The paper suggests a number of key assumptions underpinning the conceptual structure of a GR, but also that there are a number of issues related to the conceptual structure on which there has not yet been any determination, due to the fact that the development of a GR is still in the early stages of consideration and no decisions have yet been taken. This paper provides some ideas to assist the decision making process on a number of issues such as whether the GR should: be mandatory or voluntary; make public all data contained within any underlying databases; pay for data; charge for the provision of data; contain limited or extensive data on vessels; provide other monitoring control and surveillance (MCS)/IUU-related information and links in addition to a search function for users.

If a GR is to be established and run effectively, there are a number of important principles and issues of best practice which should underpin its governance. The paper suggests that four key principles are:

- Key Principle 1: Clearly articulate the division of authority, roles, responsibilities and accountability separately for a) those responsible for overall supervision/governance, and b) those responsible for project implementation;
- Key Principle 2: Ensure the transparent, timely and accurate disclosure on all material matters, including the financial situation, performance, and governance;
- Key Principle 3: Facilitate appropriate stakeholder involvement to ensure that project governance is service delivery focussed, while at the same time addressing stakeholder consultation and project decision-making separately;
- Key Principle 4: Provide for evaluation points at which the overall project is reviewed.

These principles, along with some lessons learned from case studies of other developments of a similar nature to the GR, suggest that a governance arrangement should provide for a decision-making path with COFI providing the overall mandate for the project, and thereafter for the development and implementation to be governed by a Project Board (or Steering Committee), overseeing the activities of a Project Management and Technical Unit.
In addition to this decision-making hierarchy, feedback and advisory input would also be provided between a Stakeholder Advisory Group and both the Project Board and the Project Management and Technical Unit.

With regards to governance arrangements specifically for the Project Management and Technical Unit, there are however a number of possible options. It could be:

- Hosted by/within FAO;
- Run by a not-for profit independent organisation/association with a mandate which includes MCS/IUU issues (e.g. RFMO, MCS network);
- Hosted by/within a national administration; or

- Outsourced to a private company (or perhaps a University).

Each of these four options have strengths and potential weaknesses, and further work and consideration is required before making any final decisions.

In moving forward the establishment of the GR, and in agreeing the conceptual structure and governance arrangement for the GR, a number of steps must be taken. These are detailed in a parallel output to this report (which provides the high level project plan).

Appendix 1: Activities recently completed of relevance to the creation of a GR

Activities recently completed of relevance to the creation of a GR include:

- The passing of UNGA Resolutions (2006 and 2007) referring to the GR[13]
- A study completed by FAO to test the feasibility and viability of FAO undertaking the creation and maintenance of a global record of fishing vessels, support vessels and the beneficial ownerships (in response to the 2005 Ministerial Meeting in Rome) (FAO 2006);
- The outputs of the High Seas Task Force (HSTF) which recommended a global record of vessels fishing on the high seas as a core underpinning initiative to other recommendations;
- Endorsement by COFI 2007 to further develop the concept of the GR;
- An FAO Expert Consultation on the Development of a Comprehensive Global Record of Fishing Vessels, which was held at FAO headquarters in Rome, Italy, from 25 to 28 February 2008. (FAO 2008)[14];
- Activities recommended by the Expert Consultation, and being supported by FAO, such as the establishment of correspondence groups on key technical issues such as Unique Vessel Identifiers, MCS users, and data/IT issues;
- Work funded by the United Kingdom government on market-based and private-sector incentives in support of a GR.

[13] A/Res/60/31 on Sustainable Fisheries (2006) which refers to the GR in paragraph 45, and A/Res/62/177 on Sustainable Fisheries (2007) which refers to the GR in paragraph 66

[14] The Consultation provided provide guidance to FAO regarding the future development of a comprehensive Global Record (including guidance on the scope of the record, criteria for inclusion in the record, goals of the record, the sources of data and how to obtain accurate, comprehensive and current data, the need for a unique vessel identifier, the special needs of developing countries, and other special considerations)

Appendix 2: Bibliography

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Appendix 3: Terms of Reference

The Development of a Comprehensive Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels

Terms of Reference for the Development of a Conceptual Model, Governance Options and Project Plan

1. Introduction

Illegal, unreported and unregulated fishing (IUU) and related activities remains one of the greatest threats to sustainable fisheries and those whose livelihoods depend on them. While no exact figures are known, it is widely accepted that the scale of illegal fishing is huge and worth an estimated US$10-23 billion dollars annually according to a recent MRAG study.

The adverse ecological impacts of IUU fishing are wide ranging including compromising the scientific basis of fish stock management, threatening the sustainability of fisheries that many depend on for food and income and having a disproportionate impact on non target species, habitat and ecology.

Over the last fifteen years there have been numerous calls for the development of new tools to prevent, deter and eliminate IUU fishing. One such potential tool under consideration for many years has been the development of a comprehensive global record (GR) of fishing vessels. In February 2008 the FAO hosted an Expert Consultation (EC) on the Development of a Comprehensive Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels and recommended the GR be pursued as matter of high priority and be implemented as soon as possible.

2. Background

Purpose and Uses of the Global Record
One of the greatest obstacles faced by fisheries management and enforcement authorities, RFMOs and industry is the lack of access to information on fishing vessel identification, ownership and control. This lack of transparency means there is no ability to trace vessels as they change name, flag, registration, ownership and operators. Currently, there is no single source where basic information about fishing vessels of all sizes is contained or can be accessed. If such a tool was developed it would make it more difficult and costly for vessels and companies which are acting illegally to do business.

The development of a GR would improve transparency and traceability of vessels, products, owners, operators, flags, authorisations and registration. It would facilitate risk assessment for industry, RFMOs and Governments and improve decision making including on fleet capacity, size and structure, management, safety, pollution, security and statistics and more.

The importance of the GR is underscored by new and growing market demands for ecolabels and other forms of product certification which require product traceability. Market forces and incentives could stimulate compliance by countries to provide information to the GR prior to any mandatory legal requirement being imposed.

The GR would support existing binding and non binding instruments to prevent, deter and eliminate IUU fishing and increase the effectiveness of port state measures and MCS activities.

Global Record Concept
A comprehensive GR of fishing vessels is envisioned as an internet based global portal / data base where data and information from many sources is gathered in one location. The GR can be described as a "*single window*" through which vessel related information can be accessed. Eventually, a GR would be a publicly available *one stop shop* with many linkages to information and data sources such as international, regional, national and other vessel related databases.

Some potential features of the Global Record are:

- It is record of publicly available and relevant vessel information. It is not a vessel registry that confers rights or obligations as this is a State function.

- The record will be objective, neutral and non judgemental but may contain information and linkages to other records of authorised and unauthorised vessel.

- Users will make there own judgements and risk assessments based on the information contained in the GR.

- The GR will draw on a range of publicly available information from other sources to capture information on vessel activity, historical behaviour, ownership and authorisations as well as information from monitoring, control and surveillance and port state records.

Scope of the Global Record
Designing for the future is seen as essential and therefore aspirational goals regarding the scope of the GR are appropriate. The definition of "vessel" adopted by the EC in setting the record's parameters is very broad and means any vessel, ship of another type, boat and other craft used for, equipped to be used for, or intended to be used for, fishing or fishing related activities. It has been estimated that there are as many as four million vessels which may fit this definition. Utilizing a broad definition recognises illegal fishing is a problem not only on the high seas but also in national zones.

It is important to note that while the scope is broad and aspirational, development and implementation of the GR will, by necessity occur in phases over many years.

Next Steps
In accordance with the recommendations of the EC, the UK has stepped forward as a champion for GR and, together with the FAO is undertaking a programme of activities designed to raise awareness among potential stakeholders and further develop a number of technical components to move the effort forward. This includes the establishment of Correspondence Groups, awareness raising and support activities. Also included are the commission of technical studies that require deeper analysis and specific expertise than is possible for the Correspondence Groups to give in the time available.

3. Objective

The Objective of this work is to review available relevant information both from within FAO and a wider search as necessary to develop and report on the following issues;

i. A conceptual model or models for the GR
ii. Governance options for the GR
iii. An updated GR project plan and phasing approach

4. Outputs

The outputs of this work are to prepare two documents titled;

i. The Development of a Global Record of Fishing Vessels, Conceptual Model and Governance Options
ii. The Development of a Global Record of Fishing Vessels, High Level Project Plan

The outcomes of these papers together with the outcomes of the Expert Consultation and the interim activities will be presented in summary form to the COFI at the FAO in March 2009 where decisions as to the future of the GR will be made.

5. Content of the Documents

Given the stage of development of the GR, this work will be addressed at a high and / or conceptual level and build on the outcomes of the EC and other work completed in this area.

In respect of the conceptual model and governance options the final paper of an estimated 15 pages (excluding annexes) should include the following key content:

i. Brief Introduction and Background.
ii. Review of the key principles, standards or best practice by which projects of this nature are developed and governed.
iii. Brief description by way of case studies of existing models and governance arrangements of developments with features similar to the GR.
iv. Development of GR conceptual model or models accompanied by explanation of key features and diagrammatic overview.
v. Development of governance options for the GR accompanied by an explanation of key features, and a discussion on the benefits and weaknesses of each model.
vi. Development of recommendations of the preferred governance model and next steps to progress.

In respect of the development of a high level project plan the final paper of an estimated 10 pages (excluding annexes) should include the following key content:

i. Brief Introduction and Background.
ii. Review of the key principles, standards or best practice by which long term projects of this nature are developed and managed.
iii. Brief description by way of case studies of existing management of IT development projects with features similar to the GR.
iv. Review of existing project plans for the development of the GR.
v. Development of a high level project plan that should include;
    a) an appropriate and logical long term phased approach to development and implementation of the GR,
    b) details of key GR project development activities in the next 3-5 years, and more generally beyond,
    c) the number and skill set of personnel required to implement the plan, and
    d) development of a project structure with a description of key roles and responsibilities.
vi. Review and update project costs for the next 3-5 years and more generally beyond.
vii. Development of recommendations on appropriate next steps to progress the GR.

Both documents should be appropriately referenced and contain annexes where necessary and include executive summaries and conclusions and be submitted to Stephen Stuart, Global Record Project Manager at FAO.

6. Tasks

The consultant should undertake the following tasks:

i. Attend FAO for a briefing prior to the commencement of the consultancy.
ii. Review existing documents provided by FAO and conduct a wider search for information.
iii. By way of case studies identify and collect information on a range of projects and governance arrangements with features similar in nature to the GR.
iv. Engage with key FAO staff and external experts or groups as required.
v. Monitor and engage where necessary with the Correspondence Groups.
vi. Attend and participate in an experts' meeting in London in mid January 2009.
vii. Prepare a list of documents and sources consulted in the course of this work.
viii. Prepare and present to FAO in draft form two documents titled;

1. The Development of a Global Record of Fishing Vessels, Conceptual Model and Governance Options
2. The Development of a Global Record of Fishing Vessels, High Level Project Plan

ix. Prepare and present to FAO the above described documents in final form.

7. Relevant Documents

i. Report of the Expert Consultation on the Development of a Comprehensive Global Record of Fishing Vessels, Rome 25-28 February 2008, FAO, Ref. FIIT/R865.
ii. Feasibility Study on the Comprehensive Record of Fishing Vessels, Refrigerated Transport Vessels, and Beneficial Ownership. FAO, November 2006.
iii. OECD High Seas Task Force Cost Benefit Analysis of Vessel Database. Poseidon Aquatic Resource Management, October – November 2005.
iv. Closing the Net; Stopping illegal fishing on the high seas. High Seas Task Force (2006).
v. Global Fishing Vessel Information System Feasibility Study. Governments of New Zealand and Australia, November 2006.

8. Timing

The project will commence on 27th October 2008 with a completion date of 24th December 2008

Appendix 4: Case study information on conceptual structures and governance arrangements

Equasis

Conceptual model

Equasis is an international individual vessel-based database aimed at reducing substandard shipping, and limited to safety-related information on ships. The fleet displayed on Equasis consists of merchant vessels over 100 GT that are in service or under construction. Those managing the project do not themselves enter data, and data is drawn from a variety of different types of data providers on a free and voluntary basis, with the exception of core data from Lloyds Fairplay which is paid for. An agreement is signed with each provider to define the condition of the exchange of data (e.g. property of data, right of use, etc), and the technical protocol (file format, data description, frequency of update, etc). Little information is actually stored by Equasis itself and the most detailed information is sourced on demand through the user queries directly from the providers own web-based information systems through "hyperlinks". The flow of information from Equasis back to the data providers is limited to data queries about mismatch and potentially erroneous or missing records. The frequency of updates varies from provider to provider, with the date of the latest update shown with the data as they are displayed. Data providers include a) a number of IMO Port State Control regimes such as the Paris, Tokyo and Indian Ocean MoUs on IMO Port State Control , b) private inspections (such as those completed by Chemical Distribution Institute and the Oil Companies International Marine Forum), c) IACS Classification Societies and associate IACS members (such as Bureau Veritas, Lloyds register), d) Protection and Indemnity (P&I) Clubs, and e) other sources such ILO, IMO, EMSA, and ITF. The Equasis database has 71,929 ships in the database, with 86% less than 25,000 GT (2007). These figures compare with an estimated 75,000 fishing vessels of 100GT and over. Equasis is open to all, following a free registration for statistical purposes. Equasis is neither a black list nor a white list and it does not rate ships. Information provided is as factual as possible and the user is invited to make his own judgement on the quality of the ship they are consulting.

Governance structure

An MoU between a small number of quality-minded maritime administrations[15] underpins the creation and running of Equasis. The parties to the Equasis MoU are members of the Supervisory Committee. IMO, being the main international regulator, has observer status on the Committee. The role of the Committee is to supervise the management of Equasis and decide on policy matters related to the operation and future development of the system. In the future, the MoU will be amended to allow a broader range of administrations to participate in the Equasis system. All organisations providing data to Equasis, such as maritime administrations, classification societies, insurers' organisations, shipowners' organisations, commercial data providers, etc. are represented in a consultative body, called the Editorial Board. The task of the Editorial Board is to advise the Management Unit on all aspects related to the best possible presentation of the available data, including aspects of quality control and updating. A director is appointed by the Supervisory Committee and leads the Management Unit, which carries out the daily management of Equasis. This body has the capacity to conclude agreements on behalf of Equasis with, for example, data providers, users, consultants and providers of IT service, staff, etc. The Management Unit is in charge of the daily operation of Equasis, including financial and marketing aspects. It also acts as

[15] The initiators of the Equasis project were the European Commission and the maritime administration of France as well as those of Singapore, Spain, the United Kingdom, the US Coast Guard and Japan

secretariat of the Committee. A Technical Unit is in charge of the technical operation and the maintenance of the system. These functions are performed by the 'Department of maritime information systems' in Saint-Malo, which is the computer centre of the French Maritime Authority. From the 1st of January 2009 the Equasis Management Unit will be hosted by the European Maritime Safety Agency in Lisbon. The Technical Unit will remain under the French Maritime administration.

International Phytosanitary Portal

Conceptual model

The IPP provides free publicly available information on a wide range of information by country, and a searchable database (drawn from national data) with basic reporting information on topics such as pest reports, phytosanitary regulations, and lists of regulated pests, as well as on optional information such as non-compliance, pest status, publications, and projects. It also provides information on the International Plant Protection Convention (IPPC), the Commission on Phytosanitary Measures (CPM), the International Standards for Phytosanitary Measures (ISPMs), relevant news items, and other topics of interest. Data submission is mandatory for signatories to the Convention, with the Convention specifying the data to be submitted, and all data provided by countries is publicly available. Countries nominate an IPPC contact point (and in some cases a supporting editor) to provide the necessary data, based on agreed frameworks and guidance documents. This data is either uploaded to the IPP site (in the form of attached data forms) for those countries without their own appropriate information systems, or entered in national information systems. Users of the IPP can then obtain information when using the search function, either from the data/information held by the IPP or by being directed to the national information system. Some regional organisations are also mandated to collect and provide national information to the IPP. Potential legal issues mean that countries are prohibited from deleting any data once it has been submitted (save for errors) and all information is archived for 10 years,

Governance structure

The IPPC is an international treaty, to which 170 governments (as of 10 September 2008) currently adhere, to secure action to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control. It is governed by the CPM, and the members of the Commission are the contracting parties to the Convention and are the governing body. The CPM adopts ISPMs, and also provides the mandate for the IPP by confirming the IPP as the preferred forum for national IPPC reporting and the exchange of more general information among the phytosanitary community. The IPPC Secretariat coordinates the activities of the Convention and is provided by the FAO, and the running of the IPP falls under the responsibility of the Secretariat. The Secretariat reports yearly to the Commission, which approves a workplan and budget, and information exchange is a fixed topic on the agenda each year. The Commission provides overall guidance to the Secretariat and the IPP on information issues, but those establishing and managing the IPP have considerable autonomy in making decisions about the portal, where necessary based on consultation with countries. An advisory group (principally made up of national IPPC contact points and some representation from regional organisations) also provide advice to the Secretariat/IPP on suitable changes and developments of the site. Consultation and collaboration with non-government organisations principally takes place through national governments.

European Community Fleet Register

Conceptual model

The Fleet Register is a database where all the fishing vessels flying the flag of a Member State have to be registered in accordance with Community legislation. A website site housed within the Directorate General of Fisheries and Maritime Affairs of the European Commission provides a tool allowing users to search for a fishing vessel from the "Fleet Register" database and to display its technical characteristics as well as its history, with information available for download into a text file. The website also displays graphics showing the status of the capacity of fleet for each country compared to the ceiling of capacity defined after the introduction of Entry/Exit Regime[16], and contains links to other relevant EC websites. Personal information contained in the database held by the Commission is not made publicly available for reasons for confidentiality in accordance with EC law. Member States provided data to the Commission every three months (known as a snap-shot), with data provided in a .CSV file. Registered users have access to a restricted website where they can upload their snapshots and interim transmissions. In addition they can see errors and/or warnings related to their submitted snapshot, contact details of other Member States registers in case they have to contact each other and a page about statistics. Registered users are members of the Member States' national fleet registers. The Commission then performs and automated evaluation and control of the data before uploading it to the database. The Commission is not empowered to make any changes at all to the data, and any errors identified through the evaluation and control process are referred back to the Member States who then re-submit the data. The database contains information on 86,270 active vessels.

Governance structure

The governance structure for the Fleet Register flows directly from the the Treaty establishing the European Community, and establishment of the European Commission (as the executive arm of the Community) and DG Maritime Affairs and Fisheries as the Directorate-General responsible for the Common Fisheries Policy (CFP)[17]. The mandate for the Fleet Register is provided by a number of pieces of Community Legislation[18]. The European Commission thus has overall responsibility for the managing the fleet register available to the public on its website, and itself reports to the Council of the European Union, which is made up of ministers from the Member States in the Council of Ministers.[19] On a day to day level, Fleet Register falls under the responsibility of DG-MARE D 2, where staff are responsible for the database. These staff are supported by the Commission's DG-MARE IT department. New developments and improvements on web-applications and databases are delivered by an external company which is subcontracted and situated intramuros at DG-MARE in Brussels. The Joint Research Centre (JRC) (http://ec.europa.eu/dgs/jrc/index.cfm), is a Directorate-General of the European Commission under the responsibility of the European Commissioner for Research, and serves as the Commission's in-house research based policy support centre, and may be periodically involved with proposing and testing IT models/simulations, and providing advice on the development of the web-applications.

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[16] From 1 January 2003, Member States are obliged to respect a very strict entry-exit regime applying to the capacity of their fleet measured in terms of both tonnage and power

17 The European Commission is the guardian of the Treaties and the Community's executive arm, and works in close collaboration with the European Parliament.

[18] These include: Commission Regulation (EC) No 1799/2006 of 6 December 2006, Commission Regulation (EC) No 26/2004 of 30 December 2003, Commission Decision 95/84/EC of 20 March 1995, Council Regulation (EC) No 3259/94 of 22 December 1994, and Council Regulation (EEC) No 2930/86 of 22 September 1986.

[19] The European Parliament is also often integrally involved in drafting legislation, and also has joint power with the Council over the annual budget of the European Union.

The International Register of Civil Aircraft

Conceptual model

The aim of IRCA is to provide public and private aeronautical entities with an international database comprising of harmonized and substantial information on national aircraft fleets, in order to ease data access and exchange worldwide. IRCA collects information on over 50 national aircraft registers (and over 500,000 aircraft) including USA and Canada on a single database, enabling one to produce precise statistics or to search for aircraft using one of the 45 available selection criteria. Searches can be made by aircraft type, engine type, owner, and airport. All the information in IRCA is official, since it is directly provided by National Civil Aviation Authorities, assuring the complete veracity of the data. Data is provided on a regular/periodic basis by national authorities (varying between countries), and data from national registers of civil aircraft are completed/standardised in conformity with the IACIS (International Aircraft Classification and Identification Standard)[20].

The IACIS was created by the CAST/ICAO Common Taxonomy Team (CICTT) formed in 1999 by the International Civil Aviation Organization (ICAO) and the Commercial Aviation Safety Team (CAST) to develop and promote a database collecting harmonized information on all types and models of aircraft. This is intended to ease the transfer of aircraft related data between different IT systems and different aviation organizations. While many aviation organisations use aircraft identification or grouping schemes for administrative and analytical purposes, different standards are often used within these schemas. As a consequence, the same underlying information is identified by multiple descriptors. The CICTT definitions therefore provide standards and guidance for identifying or grouping aircraft. The website's content is limited to the register itself and a few web-links to relevant organisations. The intention is for IRCA to generate some cost-recovery, with users required to pay. Annual charges range from Euro 680 for one user for the basic version and Euro 1810 for the extensive version, up to Euro 4,565 for more than 10 users of the basic version and Euro 12,127 for the extensive version. The website is available in English, French and Spanish.

Governance structure

The International Register of Civil Aircraft (IRCA) was created in 1961 as a result of a joint decision of the then UK Air Registration Board and now the UK Civil Aviation Authority, Ente Nazionale per l'Aviazione Civile and Bureau Veritas to gather in one common format national registers of various countries. These three editors have a formal cooperation agreement about how to run the website and register, and finance the running of the register and site. The International Civil Aviation Organization (ICAO) also supports the IRCA initiative (but not financially), and their interest was formalized in February 2001 by an exchange of letters between (ICAO) and the International Register of Civil Aircraft (IRCA). Bureau Veritas serves as the Secretariat for the IRCA, and manages the database and website.

[20] The IACIS has no legal status and is not a binding instrument