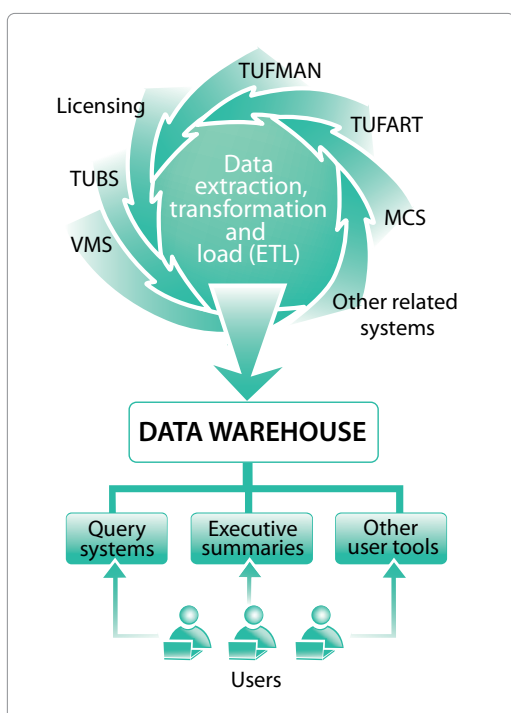


## Recent developments in regional fisheries information management systems

*Regional fisheries management database systems are being enhanced, with several initiatives looking at the establishment of fisheries information management systems (FIMS). At present, fisheries data in SPC member countries offices are managed through several independent database systems, each developed for a specific need (e.g. TUFMAN<sup>1</sup> and TUBS<sup>2</sup>, for managing tuna fisheries catch data and observer data, respectively).*

The concept of an FIMS is that it uses existing database systems, integrates and enhances them where required, and provides for the addition of new integrated systems to manage data not currently catered for. At the top of the FIMS structure is a suite of reporting systems that will pull all of the information together and provide top-level reports (integrating all of the data sources into data summaries and charts), and allow “drilling down” to see more detail if required. The types of data that may be incorporated into the system will include all tuna fisheries data, VMS (vessel monitoring systems) data, MCS (monitoring, control and surveillance) data, licensing data, and data from other important fisheries, including artisanal (possibly managed by TUFART<sup>3</sup>) and coastal fisheries, but the system will be flexible enough to cater to the specific needs of each country. The systems will also look at streamlining and formalising procedures with specialised software; for example, handling the processing of a license application from start to finish. An example structure of an FIMS is shown in the diagram below.



FIMS developments are currently being undertaken by two separate initiatives. The Papua New Guinea National Fisheries Authority (PNG/NFA) and the Office of the Parties to the Nauru Agreement have engaged an IT consulting firm from Australia (Quick Access Computing) to redevelop their existing software and develop an integrated FIMS that will provide a similar hierarchical structure for these national and subregional organisations, but with additional components specific to PNG/NFA's national database requirements. Work on this system is already well advanced and work is being undertaken to integrate the NFA system with database systems developed and maintained by SPC's Oceanic Fisheries Programme (TUFMAN, TUBS, TAGDAGER).

The second initiative is being undertaken by a group consisting of the Cook Islands, Federated States of Micronesia and Marshall Islands, which have engaged Nesh Petrovic of Taz-E to design the system and coordinate development. This group has invited participation from the Pacific Islands Forum Fisheries Agency (FFA), SPC, and the Western and Central Pacific Fisheries Commission (WCPFC) so that integration with existing systems from these organisations will be planned from the start. The joint vision of this group is to have an FIMS that will integrate relevant sets of information related to fishing, including catch and observer reports, in real time, available at the “press of a button”. The system will be in line with “best practice” using the latest technology to allow fisheries managers to make informed decisions in a timely manner. The FIMS will also allow for electronic exchanges on a national and regional basis, involving partner agencies and the fishing industry itself. The next workshop will be held in Raratonga, Cook Islands in June 2012, and will include participants from PNG and the consultants developing the NFA FIMS, which is expected to generate some collaboration between the two initiatives.

### For more information:

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<sup>1</sup> TUFMAN = Tuna Fisheries Data Management System, a database system for storage, retrieval and integration of tuna fisheries catch and effort, port sampling, unloading, and licensing data.

<sup>2</sup> TUBS = Tuna Fisheries Observer Data Management System, a database system for storage and retrieval of tuna fisheries observer data.

<sup>3</sup> TUFART = Tuna Fisheries Artisanal Data Management System, a database system for artisanal data, mostly tuna-related.