

Brief Overview – Digital Observatory for Protected Areas (DOPA)

The Digital Observatory for Protected Areas (DOPA) has been developed in collaboration with various partners including the UNEP World Conservation Monitoring Centre (UNEP-WCMC), the International Union for Conservation of Nature (IUCN), the Global Biodiversity Information Facility (GBIF), and BirdLife International and with financial support from the European Union. DOPA is conceived as a set of distributed Critical Biodiversity Informatics Infrastructures (databases, web modelling services, broadcasting services, ...) combined with interoperable web services to provide a large variety of end-users including park managers, decision-makers and researchers with means to assess, monitor and possibly forecast the state and pressure of protected areas at local, regional and global scale. It will form part of the Regional Observatory for Protected Areas and Biodiversity, which is being set up through the BIOPAMA Programme in the Eastern and Southern African Region.

In particular, DOPA aims to

- 1) **provide the best available material** (data, indicators, models) agreed on by contributing institutions which can serve to establish baselines for research and reporting (i.e. Protected Planet Report, National Biodiversity Strategies and Action Plans, ...);
- 2) **provide free analytical tools** to support the discovery, access, exchange and execution of web services (databases and modelling) designed to generate the best available material but also for research purposes, decision making and capacity building activities for conservation;
- 3) **provide an interoperable and, as much as possible, open source framework** to allow institutions their own means to assess, monitor and forecast the state and pressure of protected areas and help to further engage with the organizations hosting critical biodiversity informatics infrastructures.

The **DOPA Explorer** (Beta version) is the first version of one of the three main windows to the services provided by the DOPA (http://ehabitat-wps.jrc.ec.europa.eu/dopa_explorer/ - please request the User Manual). As a web based tool available to everyone with an access to the internet, DOPA Explorer provides simple means to explore around 9000 marine and terrestrial protected areas that are greater than 150 km², identify those with most unique ecosystems and species, and assess the pressures they are exposed to because of human development. Ecological data derived from near real-time earth observations are also made available although currently limited to African protected areas.

Two other main interfaces are planned for the period 2014-2016:

- 1) **DOPA Validator** will allow registered users to validate/invalidate the information summarized in DOPA Explorer and provide additional observations about individual protected areas.
- 2) **DOPA Analyst** will be providing end-users with a broad range of modelling tools for forecasting climate change impact on protected areas, assessing connectivity, computing niche models or to simulate consequences of adding/removing a protected area based on regional indicators.

For further information and feedback on the site and tools, please contact Gregoire Dubois (gregoire.dubois@jrc.ec.europa.eu), who is overseeing the development of the DOPA or Christine Mentzel (Christine.MENTZEL@iucn.org), who is the Regional Coordinator for the BIOPAMA Programme in the Eastern and Southern African region.

Implemented by:



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