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INTER-PROGRAMME TASK TEAM ON
FUTURE WMO INFORMATION SYSTEMS

ITEM: 2

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RUSSIAN, ENGLISH

CliWare PROJECT

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Summary and the Purpose of the Document

This document contains a description of the CliWare project that uses modern information technologies to collect and distribute hydrometeorological data recommended for the Future WMO Information Systems.

ACTION PROPOSED

It is proposed to take into account the information submitted in the present document, and to use this project as the pilot project for the Future WMO Information Systems.

CliWare project

Description

1. Roshydromet is developing the hydrometeorological climate data management system based on WEB technology. The system CliWare oriented to hydrometeorological data collection, data base management, making products, and hydrometeorological data and products distribution. The CliWare system was tested and evaluated as new CDMS by CCI and noted as the most technologically advanced of the systems which were reviewed. Roshydromet proposed this system to be shared with WMO members.

2. The following principals were used in project:
- Using open-source software;
 - Using international protocols;
 - Using international languages.

The system is developed on Java language using 3-tier EJB model. The system can be generated with using commercial or open-source software with a combination of components. For instance the system can be generated with using only open-source software including operational system. For data collection and distribution is using TCP/IP is used network including Internet and E-mail. For data access WEB browsers are used.

The system uses the following languages:

- XML and XML based MeteoXML languages;
- Resource Description Framework (RDF);
- MeteoSql;
- RDFSqL;
- W3C DOM model;
- SQL ANSI.

3. The metadata subsystem is based on Resource Description Framework of W3C consortium.

4. The Request/reply ("Pull") mechanisms are realized on HTTP è SMTP protocols. The "push" system is realized on SMTP protocol as E-mail. It is planed to use JMS. Observation data are collected from GTS in online mode with recording data into database. The demo version is available: <http://www.meteo.ru/cliware>.

Proposal

1. To include CliWare project in to list of pilot projects of the Future WMO Information Systems.