

EUMETSAT EXTERNAL INFORMATION SYSTEM – STATUS UPDATE

This working paper reports on the evolution of the
EUMETSAT World-Wide-Web service since CGMS XXVI.

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1 INTRODUCTION

The status is provided of the EUMETSAT External Information System, the project under which EUMETSAT's world-wide-web services and Internet connectivity are managed. The paper is presented as an incremental status update, showing the developments since CGMS XXVI, where a similar status had been documented in CGMS XXVI EUM-WP-15, "EUMETSAT External Information System – Status update". The latter paper is further referred to as [R1].

The subsequent sections are on the following subjects:

An update is provided on the numerous additions made to the web site content and services. Web statistics are presented, illustrating the growth of the system, and significant utilisation trends. A system configuration update is provided, and an overview of ongoing developments and future plans is listed.

2 CONTENT AND SERVICES UPDATE

Figure 1 presents the “site map”, showing the current information and service areas and topics and their organisation. In the remainder of this section, an overview is given of the changes and updates which have taken place since [R1] was compiled.

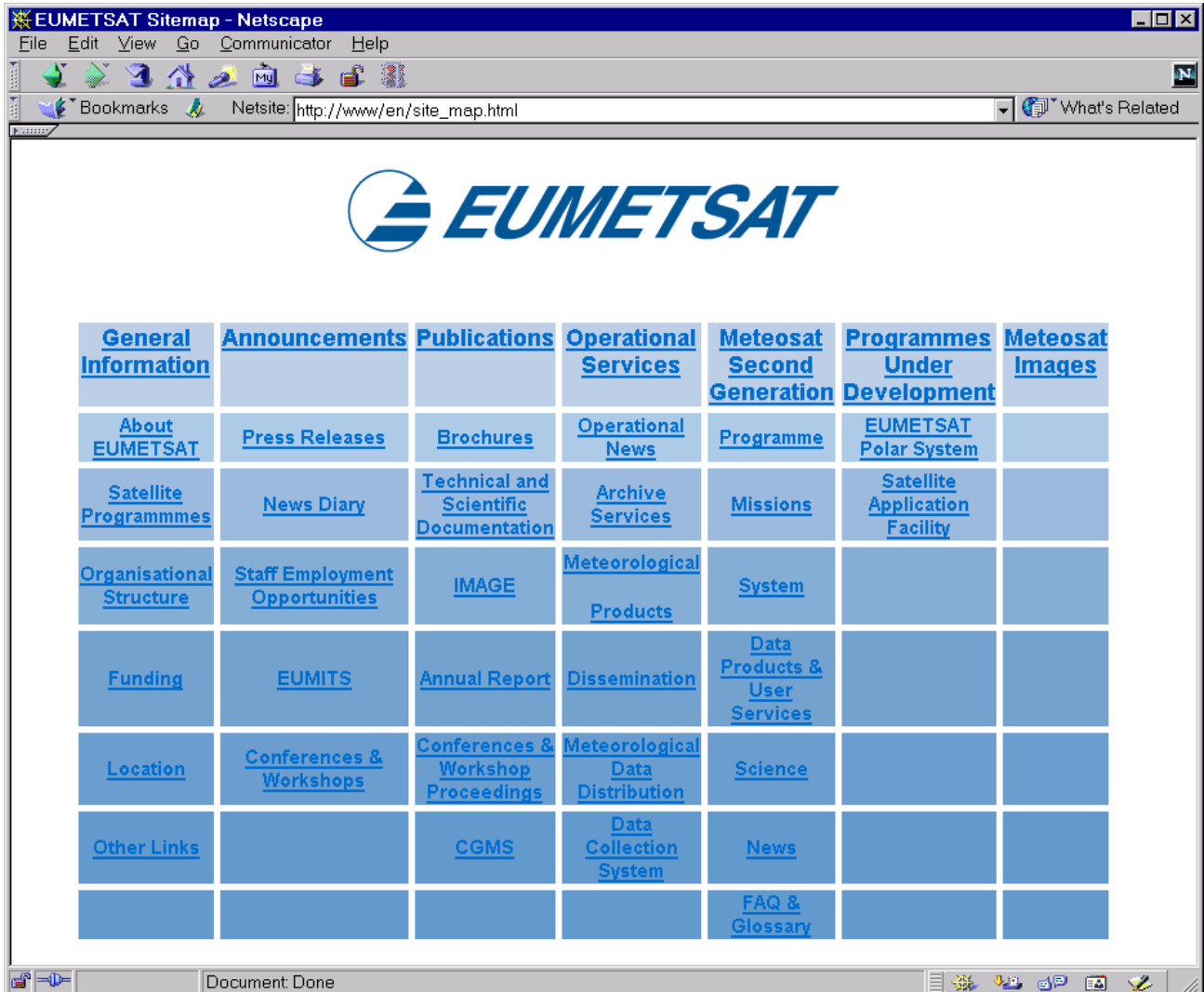


Figure 1 – EUMETSAT web site map

2.1 Publications & Announcements

The area has been split, into a Announcements and a Publications area, inside which topics have been reorganised and enhanced as follows:

Announcements

A News Diary feature was added, listing and announcing potentially newsworthy events in EUMETSAT Member States.

The EUMETSAT Invitations To Tender (EUMITS) service was introduced in July '98, being the on-line access service for all EUMETSAT ITT's. It has since handled all ITT's, and has become the unique method of publishing and distributing the latter, as from 1st January 99. Nearly a thousand users have meanwhile registered and use the system.

Publications

The former Publications topic has been split into several more specific ones, being Brochures, Technical and Scientific Documentation, and Conferences & Workshop Proceedings.

A topic on CGMS was added, containing an extensive CGMS Directory of Meteorological Satellite Applications, giving a broad introduction to the possible uses and applications of meteorological satellites.

2.2 Meteosat Second Generation

A complete new information area was set up providing a wealth of information on the MSG Programme, Missions, System, Data, Products and User Services, and Science. The information is augmented with a news and FAQ feature, as well as a glossary. Part of the information is being brought on the web in close coordination with ESA, reflecting both organisations involvement in the programme.

2.3 Meteosat Images

Based on the former Sample Products service, an on-line image browse and download service was set up, providing recent data from MTP and the INDOEX mission, in various graphical formats, common on the Internet.

A special feature was created on the occasion of the total eclipse over Europe on the 11th August 99. Limited scans of the eclipse region, showing the shadow of the moon, were made at 10 minute intervals by Meteosat 6 (the stand-by spacecraft). These were presented on the web site in low resolution JPEG and animated GIF formats. They were also offered in higher resolution, restricted to a pre-registered community of interested users, e.g. TV broadcasters. Due to the overwhelming success, in particular of the public service, the load on the web site rose to an absolute peak, causing the system to be even temporarily overloaded.

2.4 "Extranet" – type services

Two further services were introduced, which serve closed, restricted communities of registered users.

2.5 DCP message dissemination

DCP Operators are able to download their messages from the web site. This service is being currently offered as a fall-back service to the satellite based dissemination.

2.6 IDCS Database

A web accessible database was set up supporting the allocation and management of DCP channels on a global basis in the framework of the IDCS.

3 SITE STATISTICS

In this section, some summary statistics are presented, which give an indication of how the amount of content on the EEIS has evolved, as well as its usage, and the order of magnitude the system has developed into.

3.1 Size

The web site content currently (August 99) amounts to a total of around 2.5 Gigabytes, spread over approximately 7600 files. This represents roughly a sixty-fold increase of content volume, and a tenfold increase in file number, compared to last years' figures.

3.2 Usage

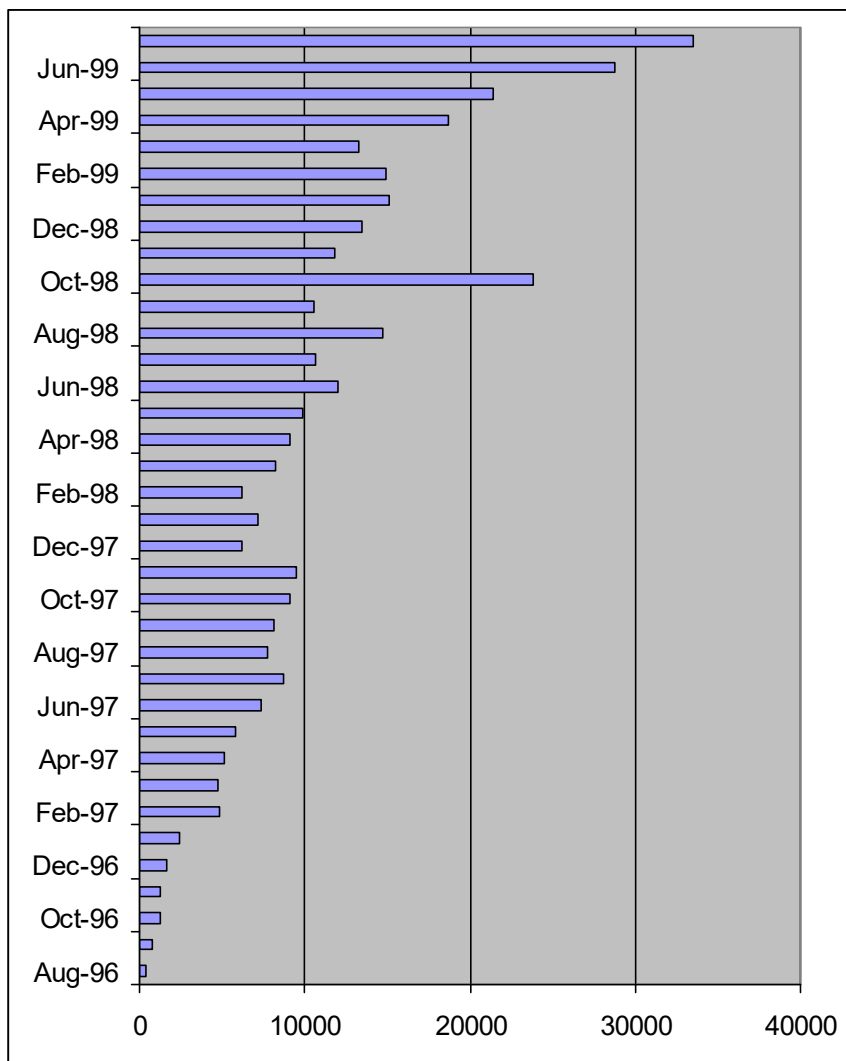


Figure 2 - Number of visitors (user sessions) per month

Figure 2 shows usage statistics, in terms of (external) visitors (user sessions) per month, over the complete period the web site has been operated. The figure nicely illustrates a continuously growing number of sessions, with a particularly strong growth rate since April this year, and reaching up to a level of 33.000 sessions per month. (The “singular” peak in October 98 has been analysed to be caused by an automatic process attempting repeatedly to access the site.)

The next figure also presents usage statistics, in terms of monthly volumes of data downloaded from the site, since the beginning of 99. The sharp increase around April is explained by the enhancement of the “Meteosat Images” service around that time, which has since proven a very popular service.

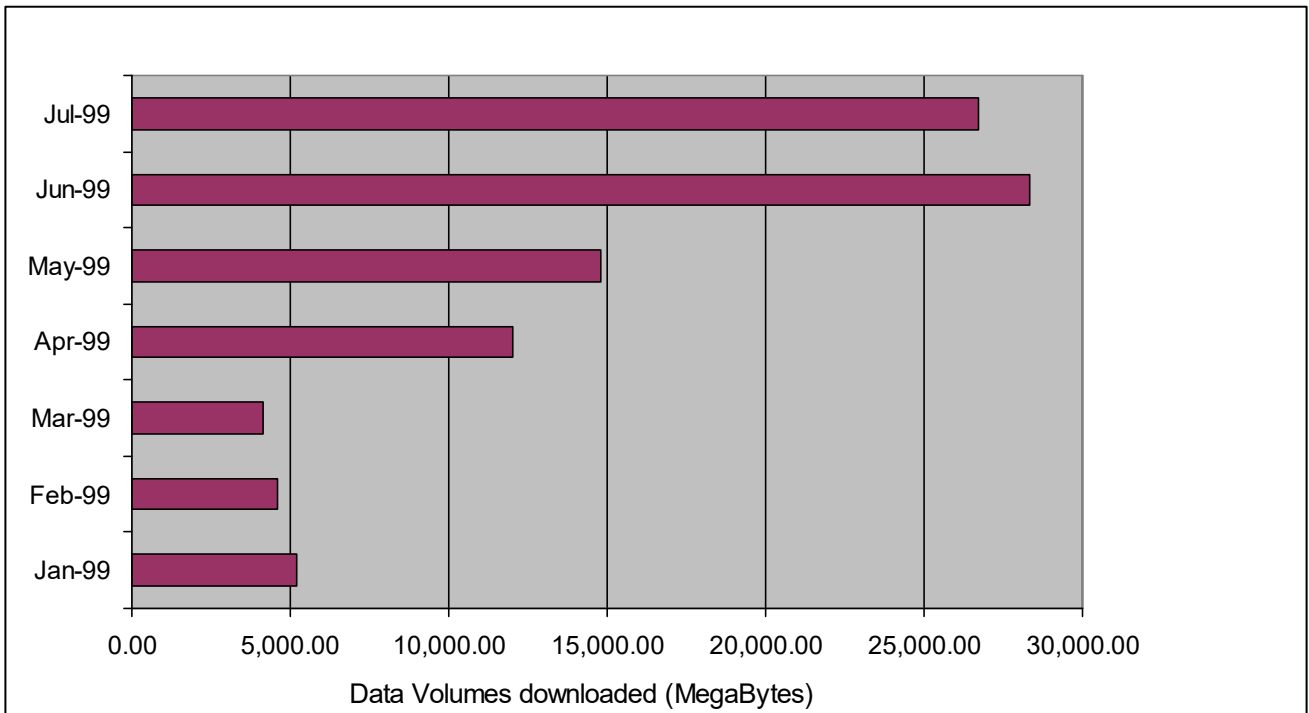


Figure 3 Monthly data volumes downloaded

4 SYSTEM UPDATE

The EUMETSAT Internet link has been upgraded to 2 Mbits/s. Preparations are currently being made to expand the live web server, and particularly make it more resilient to single point failures, thus reflecting its increased operational importance.

The system has been considered in the context of the EUMETSAT Year 2000 compliance programme, and has meanwhile successfully passed relevant tests. It is also subject to the ISO certification process, planned to be completed by the end of 1999.

5 ONGOING DEVELOPMENTS AND FUTURE PLANS

At the time of compiling this status update, a number of EEIS developments are underway or planned. The following are ongoing:

- An external development contract has been awarded to implement the U-MARF facility, including on-line user services. The latter will appear as integrated services on the EUMETSAT web site, providing capabilities to search, select and order historical satellite products and data from the archive, and have them delivered across the Internet.
- A second release of EUMITS is being prepared, offering enhancements new functions, based on feedback received during the operation of EUMITS release 1.
- Following this, a further document dissemination and information service will be developed in support of EUMETSAT's delegates, and delegate body meetings.
- The Operational Services area is being overhauled. As part of this, the "static" content describing the MTP programme will be separated out, and presented as an information area of its own, similar to MSG already today.
- An overhaul is scheduled of the web site presentation, with the aim of enhancing the efficiency and user interface.

On a longer perspective, the following activities are being envisaged:

- Development of operational dissemination services of MSG data across the Internet, covering both image data and DCP's.

6 CONCLUSION

After already having turned into an operational infrastructure supporting nearly all domains in which EUMETSAT interacts with external communities (users, customers, industry, the general public), the EEIS web site has continued to expand rapidly. In particular the offering of on-line image browse services, as well as the on-line distribution service of Invitations to Tender, have boosted the size and usage of the system.

Encouraged by this development EUMETSAT plans to continue exploiting the opportunities the Internet offers for providing cost-effective, efficient services to its users, in particular by focusing on operational access to and dissemination of satellite data and products.