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LRIT SYSTEM TRANSITION AND TEST PLANS

This document provides an overview of the USA schedules for the transition and implementation of the LRIT service.

LRIT SYSTEM TRANSITION AND TEST PLANS

1.0 Introduction

The USA has developed a transition and implementation plan for the LRIT that will commence on a GOES I-M spacecraft other than the operational satellites. Using the GOES-M spacecraft, LRIT testing was conducted from October 2002 – October 2003. Test schemes included variations of alternate transmissions of simulated LRIT signals with WEFAX and/or EMWIN broadcasts.

Testing of the LRIT Product Processing System live through the GOES-12 satellite ended on October 7th after completing a seventh week successfully. The tests were conducted so as not to impact the current WEFAX operations, as such, LRIT transmitted only during two open periods in the WEFAX schedule. NOAA's LRIT data began operational transmission, on October 7th at 00Z, in a timesharing mode with WEFAX
NOAA plans to do timesharing between WEFAX and LRIT on individual spacecraft for a limited time period (e.g., 1 to 2 years) followed by a total transition. The transition from existing WEFAX services to the new LRIT services has considered the requirements and concerns of the existing user population as well as the availability of NOAA resources (e.g., satellites, ground communications and control systems, personnel).

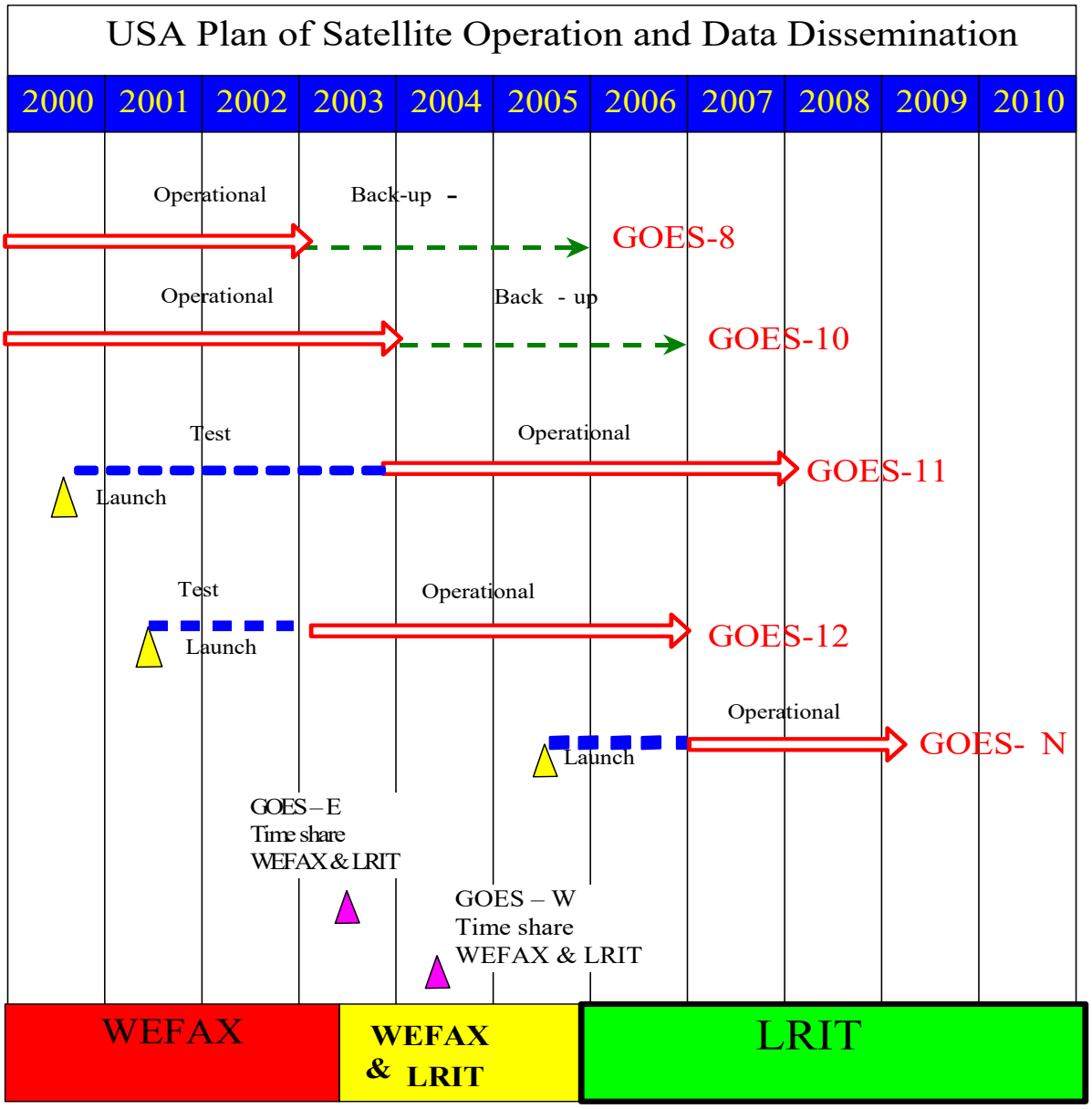
2.0 System Transition and Testing Plans

During the transition period, the USA will require the use of a GOES I-M spacecraft. The new ground equipment at the Wallops CDA stations and the LRIT test schedules allow an orderly transition to LRIT without the need to be sensitive to the specific GOES-N launch date.

Further, the LRIT transition is described as a period of parallel operations for each of the two GOES satellites where both WEFAX and LRIT services would be simultaneously broadcast (i.e., timeshared GOES I-M transponder) for a specified transition period, followed by a full and permanent transition to full LRIT services. Currently, using the GOES-East (GOES-12) satellite, NOAA's LRIT data transmissions are scheduled and taking place daily from [HH:45 to HH+1:14] and WEFAX data from [HH:14 to HH:45].
A goal of the transition plan is to provide the capability for an extended transition period without imposing significant demands for additional space, ground, and personnel resources. Current assessments of NOAA's plan are encouraging in the ability of the GOES I-M series to simultaneously accommodate both WEFAX and LRIT data through timesharing techniques.

The current plans for LRIT implementation and transition testing is as follows:

- Initial ground testing of simultaneous LRIT and existing EMWIN transmissions were positive (i.e., acceptable performance) at the 128 kbps data rate.
- Timesharing using GOES –12 (east) in place since October 2003 and will continue for at least a year. LRIT only transmissions should begin the end of 2004.
- Timesharing using GOES – West is planned to start the 2nd quarter of 2004.
- Full LRIT only (no WEFAX) is planned to begin late 2005.



The latest plans and information regarding the NOAA LRIT project can be found on the Web at http://noaasis.noaa.gov/NOAASIS/ml/LRIT.html.