Status and Problems of the IDCS

To provide a report on the status of the GOES IDCS channels and annual summary of DCP messages on each individual channel.
Status and Problems of the IDCS

1. INTRODUCTION

The High Data Rate Project in the United States GOES DCS Program is finally working as planned. The demodulators are showing good performance. There are four certified transmitter manufacturers, and approximately 2500 time slots have been assigned to 300 baud transmissions, and 250 assigned to 1200 baud transmissions.

The DAPS II development effort is nearing completion. The hardware has been delivered to the ground station and to the management offices. Software has been installed, and Custom-Off-the-Shelf (COTS) packages are due to be upgraded to the latest operating version. Once the upgrades are made, and regression testing for the upgrades has been completed, we will begin final acceptance testing. While we do not expect the system to be at the standard we would have liked, we believe it will be operable, and we will begin making improvements as soon as the warranty period is over (one year). As part of the DAPS II, NOAA contracted to have a complete set of digital demodulators built, replacing the entire set of demodulators at the Wallops CDA. Training for DAPS II will begin in November, 2003, and will proceed until February, 2004.

2. STATUS OF IDCS

This document presents a status report on the performance of the International Data Collection System (IDCS). Anticipating the delivery and installation of the DAPSII system, the current monitoring procedures were interrupted several times. In early September, the monitoring activities were terminated upon the arrival and installation of the DAPSI system. Monitoring of the IDCS operation is expected to resume in January 2004.

As of the beginning of September 2003, the USA database contained only 177 International DCPs (IDCP) active on 11 of the 33 international channels:

<table>
<thead>
<tr>
<th>Channel #</th>
<th>06</th>
<th>07</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>23</th>
<th>27</th>
</tr>
</thead>
<tbody>
<tr>
<td># of IDCP</td>
<td>30</td>
<td>39</td>
<td>15</td>
<td>2</td>
<td>10</td>
<td>10</td>
<td>6</td>
<td>6</td>
<td>21</td>
<td>20</td>
<td>18</td>
</tr>
</tbody>
</table>

It is to be noted that a conflict in the addressing scheme makes it difficult for the USA to include new addresses generated by EUMETSAT. Some of the addresses generated for the IDCS by EUMETSAT already exist in the USA database, assigned to US platforms that have been operating for decades. This conflict was not recognized by the USA delegation to the CGMS at the time that the scheme was agreed upon, and has
been recognized as a serious problem in database coordination among the satellite operators. The USA plans to address this discrepancy after the completion and phase-in of DAPS II.

The graph below is a summary of the good and bad messages transmitted on the IDCS channels. During the months of June and July, the totals show an extreme drop-off due to activities related to the preparation for the DAPSII installation.

3. INTERFERENCE TO THE IDCS

Because of preparations leading to the installation of the DCS Automatic Processing System II, activities associated with monitoring the IDCS for interference were suspended.

4. CONSOLIDATED LIST OF IDCS ALLOCATIONS

Once again, there have been very few new allocations of IDCPs within the past year.

5. CONCLUSION

CGMS Members are invited to take note of the status and performance of the IDCS at www.dcs.noaa.gov.