



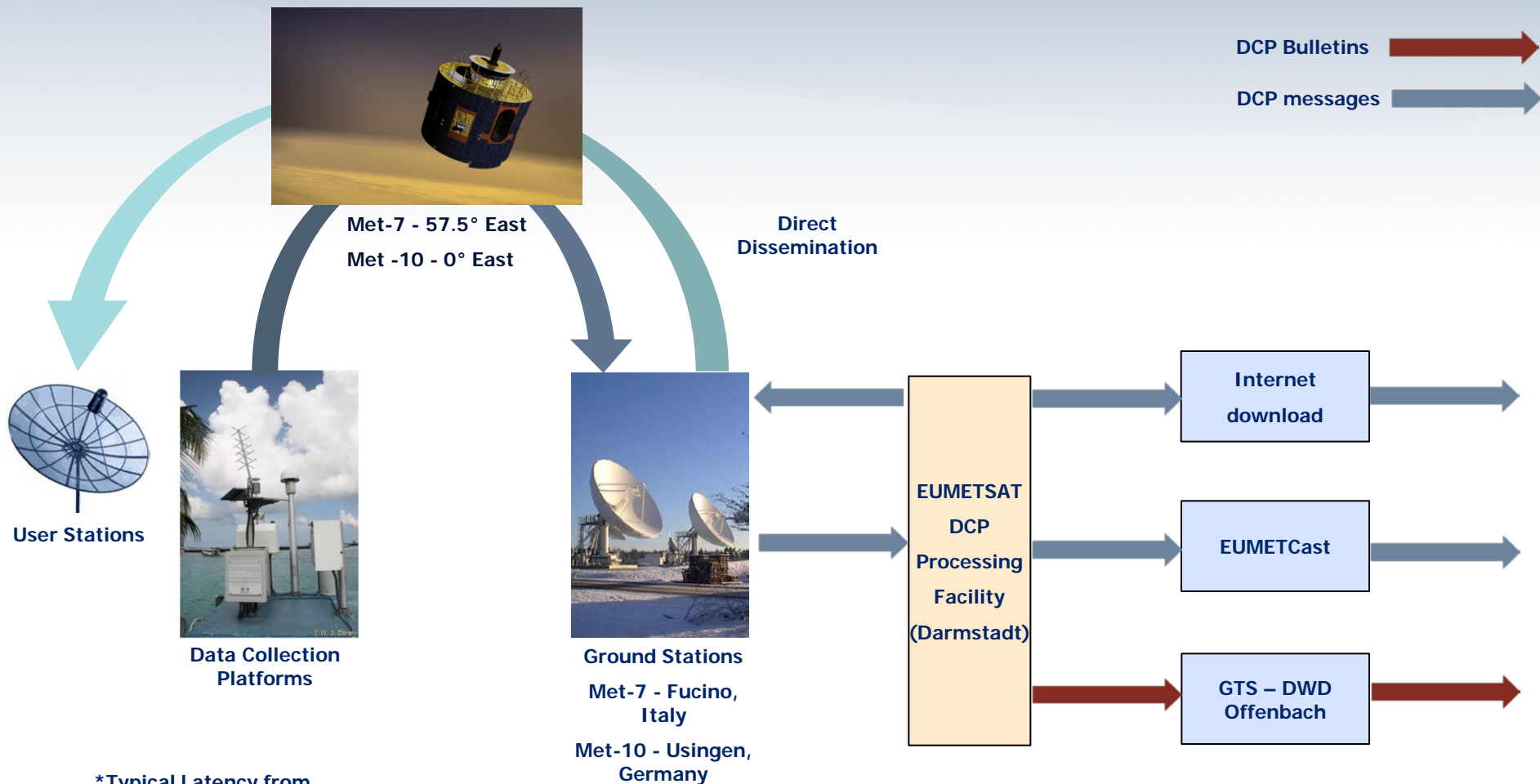
EUMETSAT DCP Services

Wil Doran – External Data Services





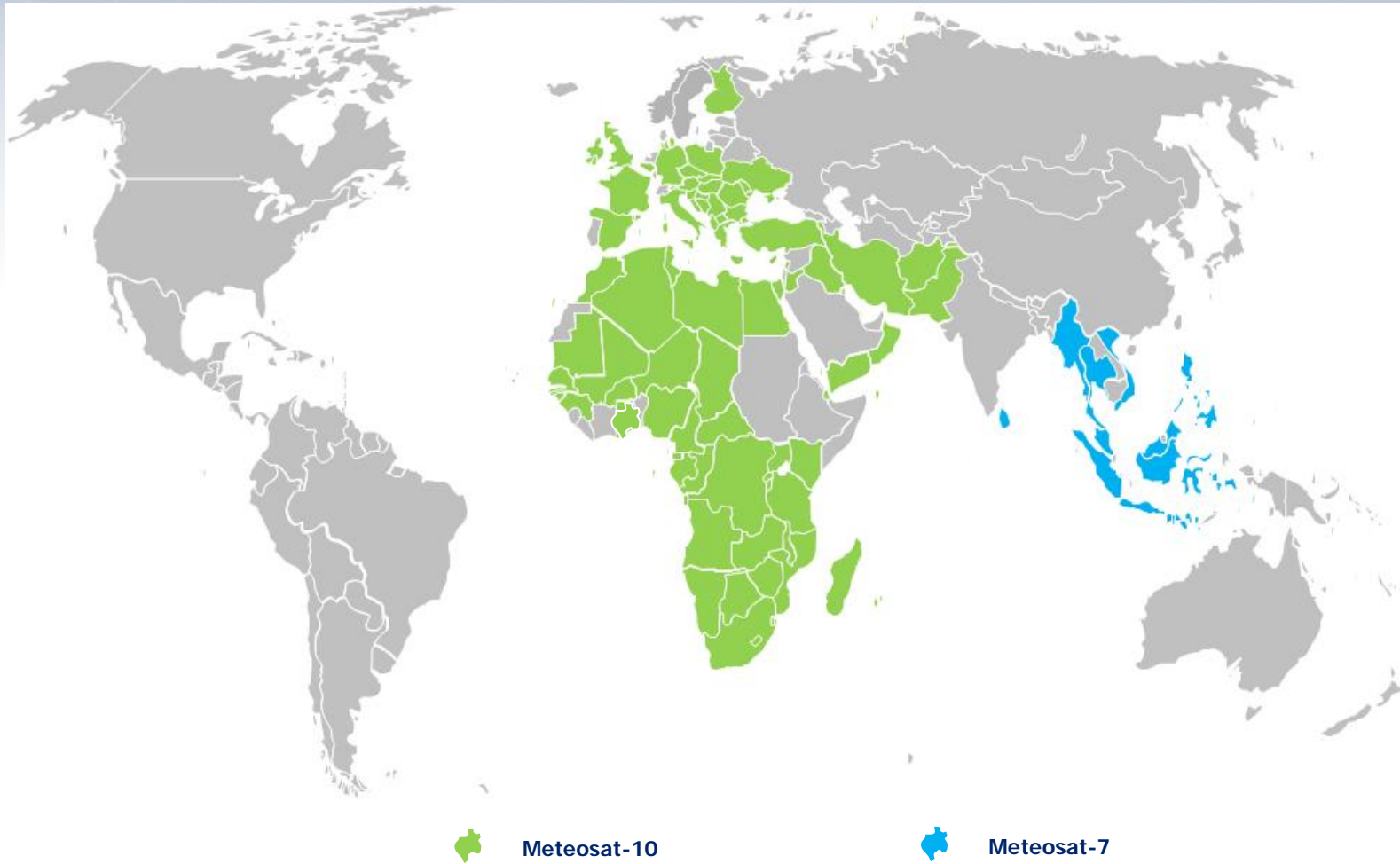
DCS System Overview – DCP Data Flows



*Typical Latency from observation to User reception is < 10 minutes

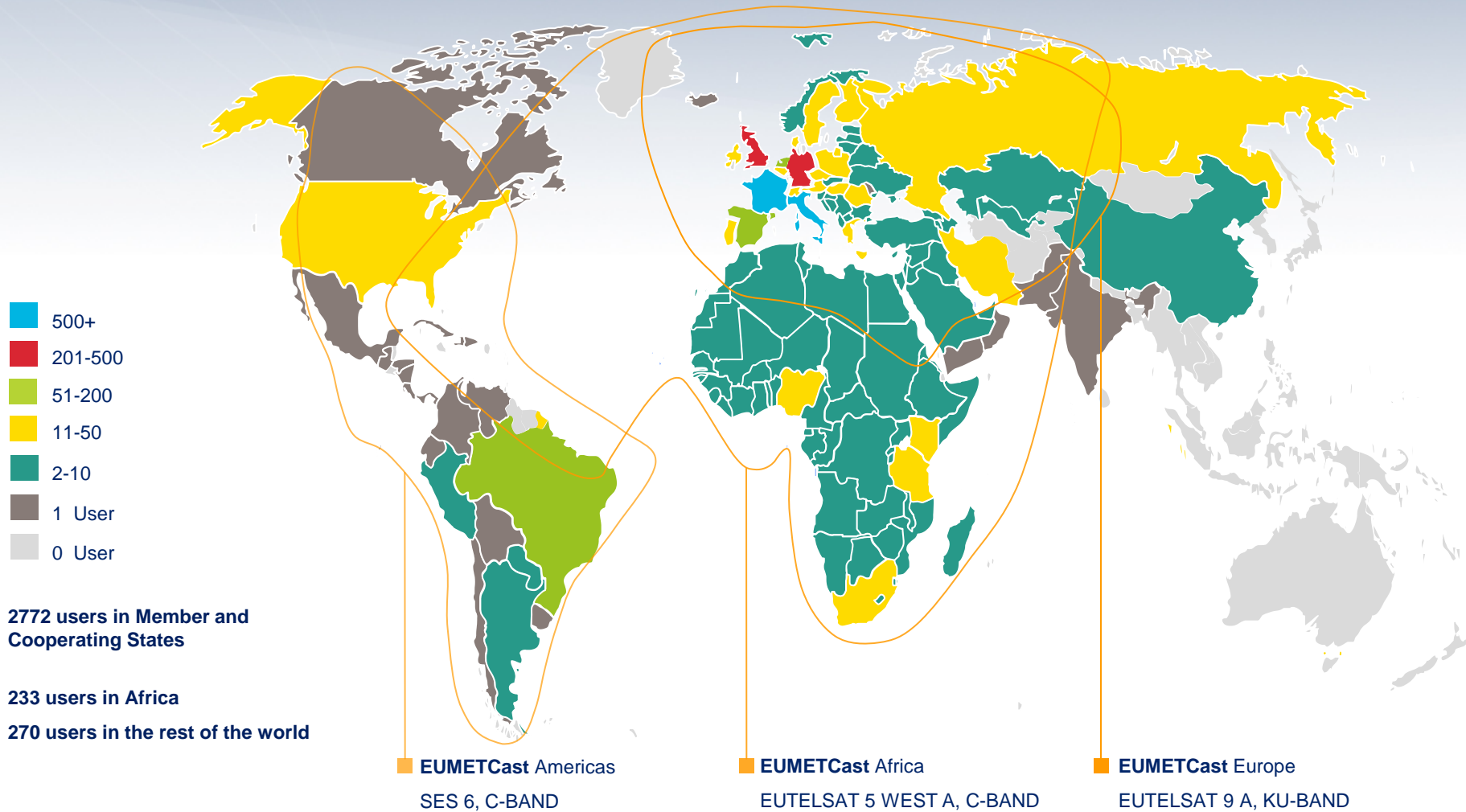


DCP Users by country





Delivering DCP data to users worldwide





DCS – Users (approximately)

- Number of Operators – 126
- Number of Countries – 70 (Europe, Africa, Asia)
- Number of allocated DCPs – 1257
- Number of DCPs transmitting – 656





Standard and High Rate DCPs

- The current Meteosat system employs 100bps 'Standard' Rate DCPs
- The capability for receiving, processing, and disseminating High Rate DCPs, 1200 bps, was recently introduced for the 0° Meteosat Second Generation Satellites, and also for 57.5° for Meteosat First Generation (this will continue until the beginning of 2017)
- Both Standard and High Rate will be supported for the foreseeable future
- **The first HRDCP was certified in March 2015 (Signal Engineering)**



HRDCP characteristics

Characteristic		Standard DCP	High-Rate DCP
Baud rate		100	1,200
Current slot allocation		1 minute, 30 seconds	15 seconds minimum
Timing accuracy		+/- 15 seconds	+/- 0.5 seconds
Data per DCP message		649 bytes maximum	1322 bytes for 15 second time slot
Channel bandwidth	MTP	3 KHz	2.25 KHz
	MSG	1.5 KHz	
Maximum number of messages per channel per day		960	5,760
Maximum message size of single message		649 bytes	65535 bytes – (Initial max slot 1 minute at 7343 bytes)

- Convolution and Reed Solomon Coding provide more robustness against interference
- Modulation scheme: OQPSK

Coordination Group for Meteorological Satellites (CGMS)

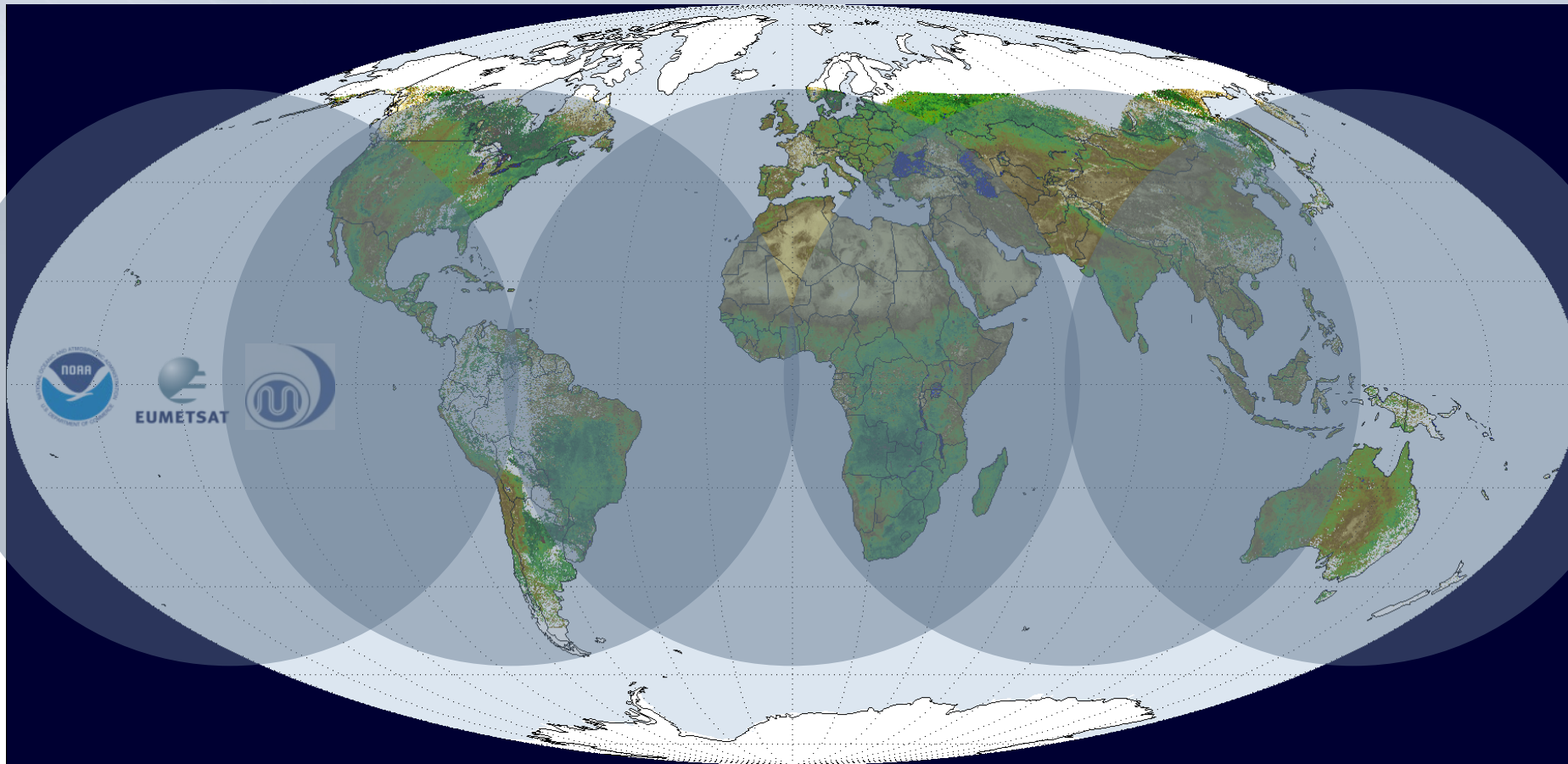
CGMS provides an international forum for the exchange of technical information on geostationary and polar orbiting meteorological satellite systems



The main objective of CGMS is to coordinate long-term, sustainable satellite systems relevant to weather and climate, to which both operational and research and development space agencies contribute, while responding as far as possible to the requirements and related programmes of the World Meteorological Organisation



CGMS DCS Systems – Global Coverage





SATCOM Forum

- The primary aim of such a Forum would benefit the existing User Community, but could also provide a 'one-stop-shop' for new users who wish to collect data from remote sites.
 - Includes **DCS**, ARGOS, Iridium, Orbcom, Inmarsat...
 - Users Representatives
 - Transmitter/System providers and Integrators
- All the CGMS DCS information will be collated in a single 'Guide' in preparation for the first Satcom Forum meeting 2015/16



Questions?