

## I.1 IT Infrastructure

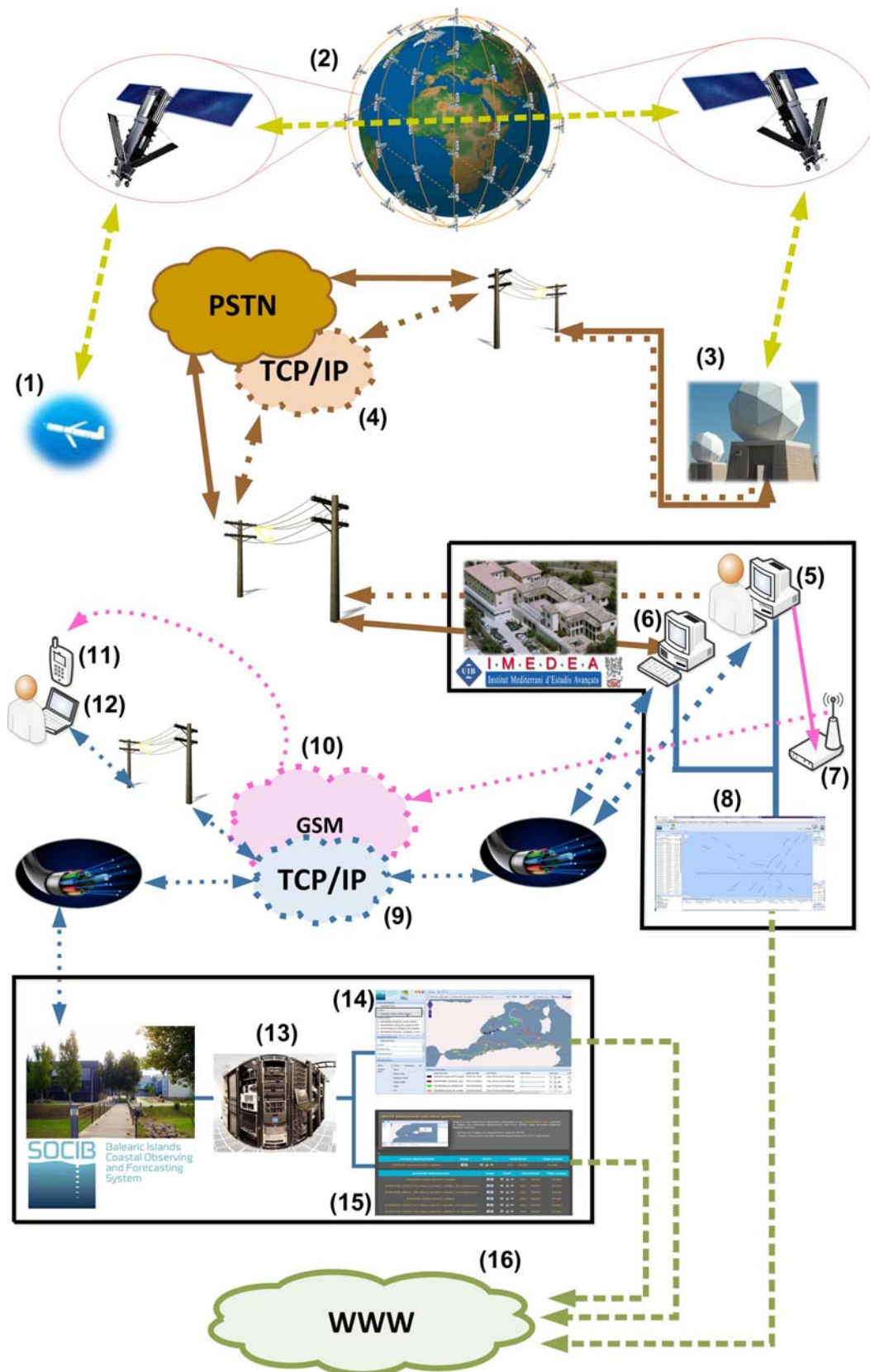


Figure 1. IT Infrastructure used for Glider operations

- (1)** Deployed Glider with a high signal-quality and good sky-view connecting to
- (2)** Iridium® satellite network that routes the call to the
- (3)** ground gateway station(GGS). Using either
- (4)** RUDICS (     ) or DIAL-UP (     ), GGS establishes the call between the Glider and
- (5)** IMEDEA's Primary Control Computer (PCC) or
- (6)** IMEDEA's Secondary Control Computer (SCC); respectively (with or without local Piloting activity).

During that call, Glider and PCC/SCC will exchange commands, near-real-time-files and the first will create Logfiles. These Logs will be parsed to create an SMS that will be delivered by the

- (7), (10)** GSM modem connected to PCC to the
- (11)** smartphone used by the Pilots during 24/7 monitoring and surveillance.
- (12)** Pilot's personal laptops have also total access to PCC and SCC from everywhere. At the same time,
- (8)** backup on-line tracking tool (GAPP) will publicly show the Glider's updated position; as well as other engineering info contained in the Logfiles and plots of the near-real-time-files sent by the Glider. These files are then pulled by
- (13)** SOCIB's data-center computers, on a
- (9)** high-data-transfer optical network, that processes the engineering and scientific information contained in these files and offers services of
- (14)** principal on-line tracking tool (DAPP) and
- (15)** public repository with mission data in standardized netCDF and preliminary plots. Along with DAPP, these services are
- (16)** freely available 24/7 through the Internet not only by IMEDEA/SOCIB staff but to the (inter)national community and general public.