

The Italian Space Agency has set the programme PAGIS in order to produce geological maps of Mars and, in the future, of other planetary bodies. The programme has the scientific aim to set the procedures and standards in order to perform the geological mapping of Mars taking full advantage of the new data set. The current missions, and in particular Mars Express and Mars Reconnaissance Orbiter are sending data that can be used for a detailed analysis of the surface and subsurface. It is now possible to identify and map sedimentary facies and bodies, recognise small-scale features, reconstruct in three-dimensions the geological units, etc. These new (for Mars) capabilities must be embedded in the geological mapping to create the next generation of geological maps. In order to achieve this result the European geological and planetological communities must undergo a major scientific and organisational effort. The programme PAGIS is triggering this process by starting the production of geological maps (Pacifi, this conference) and by creating the digital tools to perform the mapping in a collaborative manner. The programme of the Italian Space Agency is also building a digital structure where to perform data processing and digital mapping in a GIS environment. The tools will allow the analysis of the data and the geological mapping in a collaborative way based on WebGIS platform. Operators located in different places will be able to exchange data and maps via the web in order to perform the mapping. They will be able to obtain and share data from a common data base and also, they will be able to contribute to it increasing the collaborative nature of the system. The programme is underway and the first scientific and IT products are available. It is also planned to achieve or contribute to achieve: geological standard procedures for the mapping of Mars, a series of geological maps of Mars, a three fold digital system based on processing, data management and GIS mapping. Due to the collaborative nature of the programme scientists are invited to join and support this initiative.