

International Cartographic Association

Commission on Digital Technologies in Cartographic Heritage

Report of the Work carried out in the period 2011-2015

Terms of Reference: According to the 2011-2015 period Terms of Reference (ToR) the Commission dealt with the deepening and broadening of the issue of Cartographic Heritage (CH), the development of methodologies and standards for proper 2- and 3- d digitization of CH objects, the study and implementation of tools for comparative analyses on the content of old maps, the digital map libraries and collections (archiving, matching, management, networking, accessibility) and the modern IT and interactivity for attracting the general public to CH. The Commission attracted **young researchers** from non-technological fields of study and research (e.g. geography, humanities, librarianship) CH familiarising with digital and exploited the grounds for cooperation with **map libraries, map archives, map collections and map curators** and with SMEs dealing with digital high quality image capturing, processing and visualization technologies. For the cooperation with curatorship operators the contribution of the Vice-Chair **Carme MONTANER** was significant.

Websites: The **Commission website** (xeee.web.auth.gr/ICA-Heritage) was redesigned and kept updated as well as a new website (xeee.web.auth.gr/ICA-Heritage/MAGIC) designed and kept updated by the Commission in order to satisfy the strategic partnership agreement with the **Map & Geoinformation Curators Group (MAGIC)**.

Organisation: In order to enforce the Commission's administrative capacity and to attract the institutional interest to its work and activities two "groups" were introduced in the structure of the Commission, namely the **Supporting Institutions (SI)** group and the local **Commission Desk (CD)** group. The SI members with interests in the Commission's were from the **Institut Cartogràfic i Geològic de Catalunya**, Map Library, Barcelona (contact: Carme MONTANER), the **Università IUAV di Venezia**, Photogrammetry Lab, Cartography Lab (contact: Francesco GUERRA, Caterina BALLETTI), the **National Library of Scotland**, Map Collections, Edinburgh (contact: Chris FLEET), the **Eötvös Loránd University**, Department of Cartography and Geoinformatics, Budapest (contact: Laszlo ZENTAI), the **Ionian University**, History Department, Corfu (contact: Dimitrios ANOYATIS-PELÉ) and the **Aristotle University of Thessaloniki**, School of Rural and Surveying Engineering, Department of Cadastre, Photogrammetry and Cartography (contact: Chryssoula BOUTOURA, Alexandra KOUSOULAKOU). The SIs supported the Commission work especially in organising its annual Conference in association with the CD members at Thessaloniki. The combination of the SIs with the CD (Chryssoula BOUTOURA, Alexandra KOUSOULAKOU, Angeliki TSORLINI, Maria PAZARLI, Nopi PLOUTOGLOU) proved to be an excellent example of good practice for the overall and the specific Commission work, helping among other things the advancement of the consolidation of an international group working, publishing and participating actively on the issues of the ToR, which was particularly evident in the annual Commission's Conferences.

Annual Conferences: Fundamental task was the organization of the annual series of Conferences **Digital Approaches to Cartographic Heritage** (xeee.web.auth.gr/ICA-Heritage/workshops.html). The 6 Commission Conferences of the period 2006-2011 organised in Thessaloniki, Athens, Barcelona, Venice, Vienna and The Hague supported by the hosting institutions. The 2012-2015 period 4 annual Conferences organised in:

- **Barcelona** xeee.web.auth.gr/ICA-Heritage/2011_2015/BARCELONA_2012/index.htm
- **Rome** xeee.web.auth.gr/ICA-Heritage/2011_2015/Roma2013/index.htm
- **Budapest** xeee.web.auth.gr/ICA-Heritage/Budapest_2014.htm
- **Corfu** xeee.web.auth.gr/ICA-Heritage/Corfu_2015.htm.

Thanks to these 10 annual Conferences the Commission succeeded to: (a) formulate and advance CH and its place in the ICT mainstream, (b) expand the horizons and open new ways in CH research, (c) inspire new and innovative partnerships and joint ventures, (d) contribute in the development of new products in digitisation hardware and services, (e) encourage and promote the dialogue between the ICT and the history of cartography - curatorship communities and (f) develop expertise and a new CH field of study and research. The Commission offered also expertise organising two **Tutorials**: on **3-D digitisation focused on globes** guided by IUAV and AUTH SI members (National Library of France, Paris 2011) and on **Georeference for "non-experts"** guided by AUTH SI members (State Archives of Greece, Corfu 2015) xeee.web.auth.gr/ICA-Heritage/Corfu/Georeference.html.

Cooperation with other ICA Commissions and Cartographic Societies: The meeting of ICA Commission on **Map Projections** (Chair Miljenko LAPAINE) was hosted in Corfu, May 2015, during the CH Commission 10th Conference, making free use of all available facilities. The Commission keeps close ties with the **Hellenic Cartographic Society** (HCS), assisting its National Conferences held every two years. Significant was the contribution to the 12th HCS Conference, Kozani 2012, at the presence of the ICA Secretary General Laszlo ZENTAI (*ICA News*, 60, 2013, 1, p.11-12, icaci.org/files/documents/newsletter/ica_news_60_2013_1_lq.pdf) and to the 13th HCS, Patras 2014, celebrating HCS's 20 years, at the presence of the ICA President Georg GARTNER (*ICA News*, 63, 2014, 2, p.11, http://icaci.org/files/documents/newsletter/ica_news_63_2014_2_lq.pdf)

Strategic Partnership: In May 2014, after a period of discussions with LIBER's Groupe des Cartothécaires, the Commission partnership with the then established **Maps & Geoinformation Curators Group (MAGIC)** was decided in a relevant Conference held in the National Library of Slovenia at Ljubljana, with representatives from Belgium, Croatia, Czech Republic, Estonia, France, Germany, Hungary, Latvia, Netherlands, Russia, Serbia, Slovenia, Spain, Sweden and the United States (*ICA News*, 62, 1, 2014). Since then the strategic partnership was flourishing as it was seen in the next Commission Conferences of Budapest (2014) and Corfu (2015). icaci.org/files/documents/newsletter/ica_news_62_2014_1_lq.pdf.

Publications: The output of the Commission work is documented in the independent free web international journal **e-Perimetron** (www.e-perimetron.org), on sciences and technologies affined to the history of cartography and maps. This journal founded in 2006 is since then in close association with the Commission publishing selected papers presented in the annual Commission Conferences, coupling the Commission work and contributing in the spreading of the content and context of CH and its evolution into the Digital. In the 9 complete volumes, from 2006 to 2014, plus the two 2015 issues, the journal counts **38** issues with **204** papers (ca 5 papers per issue) for a total of **2354** pages (ca 11.5 pages per paper). According to the statistics kept since 2009, e-Perimetron was viewed, in average, 5940 times per year, or 16 times per day, by 2850 visitors per year or almost 8 visitors per day, from 130 countries (the top-10 in %, from: Greece 21.9; USA 16.1; Italy 8.1; UK 5.0; Germany 4.5; France 4.3; Spain 3.3; Brazil 2.4, Switzerland 2.3; Czech Rep. 2.0)

Focused contributions: The Commission is contributing invited at focused scientific events, as it was the case of the important recent Workshop on **Ancient Chinese Maps and Exchange of Chinese-Western Cartographical Culture** held in Beijing, June 2015, at the Institute of Geographic Sciences and Natural Resources Research of the Chinese Academy of Sciences, co-organised by the Commission of Cartography and GIS of the China Society of Surveying & Mapping and Geoinformation under the sponsorship and support of the Zhengzhou University of Information Engineering and the State key Laboratory of Resources and Environmental Information System. Invited academicians, professors, scientists, researchers and graduate students coming from research institutes of the Chinese Academy of Sciences, Universities, the National Library of China and other Institutions, presented their research on the issue and participated in round table discussions for future work and cooperation.

Impact: In its 10 years of work, the Commission contributed in the rising of a number of new key issues, like e.g., the introduction of a new field of thought, literacy, research and implementation in the international cartographic community, that of CH, and of CH as a discrete component in the overall Cultural Heritage; the attraction in the cartographic community of new partners from other communities dealing with maps, like the map libraries, map archives and museums; the explicit involvement of the cartographic digital mainstream, in the context of geomatics, into the general domain of Cultural Heritage; the merging of young researchers from geomatics, geography and humanities to focus on a common object of research and implementation, that of CH; the providing new tools and examples of good practice for the study of old maps. The Commission's working output and production of ideas influenced SME operators, in the digitizing industry and in the development of applications, to design, implement and provide better products and innovative services to their clients, mostly in map libraries, and accommodated groups of researchers in humanities and relevant fields of study to approach cartography and maps. The broad diffusion of the goals achieved these 10 years should be now the main concern in order to spread the Cartographic Heritage into the largest possible communities of people dealing with the legacy and the culture of maps.

Evangelos LIVIERATOS, livier@auth.gr
Commission Chair