

# Council

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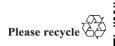
**Twenty-first session** 

Kingston, Jamaica 13-24 July 2015

# Election to fill a vacancy on the Legal and Technical Commission in accordance with article 163, paragraph 7, of the United Nations Convention on the Law of the Sea of 10 December 1982

# Note by the Secretary-General

- The Council of the International Seabed Authority is invited to note that Domenico Da Empoli (Italy), member of the Legal and Technical Commission, has resigned, owing to health reasons. Mr. Empoli was elected as a member of the Commission on 21 July 2011 (see ISBA/17/C/21, para. 18), for a term of five years beginning 1 January 2012.
- In accordance with article 163, paragraph 7, of the United Nations Convention on the Law of the Sea of 10 December 1982 and rule 80, paragraph 3, of the rules of procedure of the Council, in the event of the death, incapacity or resignation of a member of the Commission prior to the expiration of the term of office, the Council shall elect for the remainder of the term a member from the same geographical region or area of interest.
- Article 163, paragraph 3, of the Convention and rule 81 of the rules of procedure of the Council provide that members of the Commission shall have appropriate qualifications in the area of competence of the Commission and that States parties shall nominate candidates of the highest standards of competence and integrity with qualifications in relevant fields, so as to ensure the effective exercise of the functions of the Commission.
- By a note verbale dated 2 July 2015, the Permanent Representative of Italy to the United Nations informed the secretariat of the Authority of the nomination of Marzia Rovere, as a candidate to fill the vacant seat on the Commission. The curriculum vitae of Ms. Rovere is contained in the annex to the present note.





## Annex

### Curriculum vitae\*

#### Personal information

First name(s)/ Surname(s) Marzia Rovere

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Website www.ismar.cnr.it/people/rovere-marzia

http://scholar.google.com/citations?user=4NNiCTwAAA

AJ&hl=en

Nationality, Gender Italy, Female

Date of birth 4 December 1974

### Resumé

Laurea cum laude in Geology (1999), Ph.D. in Earth Sciences (2002), University of Bologna. Research scientist at the National Research Council since November 2009. Since the start of her career she has devoted herself to marine geology and has participated in 30 oceanographic cruises, both in the oceans and in the Mediterranean Sea for scientific purposes and offshore industrial exploration. She served as co-chief scientist in a number of them. She began investigating the deep oceanic crustal structure through multichannel seismic reflection methodology and later on, she applied the acquired skills to the marine cartography of the Adriatic Sea. She designed and finalized the five cartographic sheets of the Adriatic Sea (NK33-5 Pescara, NK33-1/2 Ancona, NK33-8/9 Bari, NL33-7 Venezia, NK33-6 Vieste), scale 1:250.000 and wrote the explanatory notes. More recently, she has been studying deep-sea depositional systems, mass-transport complexes along continental slopes of the Central Mediterranean area, cold seep and hydrothermal systems and she is using seafloor mapping as a tool to quantify the geological hazard (landslides, volcanoes and earthquakes) at sea and for this reason she is the leader of the CNR TA.P05.022 task, geomorphology of the continental margins. Her interests are focused also on the definition of the Mesozoic Eurasia-Africa plate boundary in the SW Iberia offshore; in the gross-scale study of tectonic structures in foreland geodynamic contexts; in the geological characterization of potential submarine tsunami sources. She is now also involved in the exploration and

<sup>\*</sup> Curricula vitae are issued without formal editing.

quantification of marine georesources (hydrothermal iron-oxyhydroxides, enriched sediments beneath hydrothermal plumes, Fe-Mn oxyhydroxide phases at cold seeps, deep sea ferromanganese crusts, hydrous Fe and Mn oxides, Cobalt-rich Fe-Mn crusts at the seamounts and massive sulphides) with the aim of building an interoperable database infrastructure of the marine Raw Materials in the Italian seas and for a sustainable seabed mining. For this purpose she is now leading an action on marine resources under the umbrella of the RITMARE project, a national flagship program funded by the Italian Ministry of Research and Education. She is coordinating a project funded by Regione Puglia for the assessment of the offshore sand deposits for beach nourishment along the Apulian coast.

She is also interested in data sharing and geo-data bases on a European Union scale. She is coordinating the Italian participation in the EMODnet Bathymetry project of the Directorate-General for Maritime Affairs and Fisheries, towards an accessible and sustainable digital mapping of the European sea-beds. She participated in several European Union projects (Framework Programme and European Science Foundation) and other national programmes such as PRIN, APAT and DPC; she also worked for projects funded by consortia of oil companies and public stakeholders.

She is adviser of several undergraduate, M.Sc. and Ph.D. projects. She often participates in initiatives related to Citizen Science. She is author and co-author of several Institute for Scientific Information) articles. She is a member of the General Bathymetric Charts of the Oceans (GEBCO) Technical Sub-Committee and she has been recently appointed as member of the joint International Oceanographic Commission-International Hydrographic Office (IOC-IHO) GEBCO Guiding Committee. She is thus the GEBCO representative in several venues and events, such as at the Eastern Atlantic Hydrographic Commission.

Occupational field	Marine Geology and Geophysics			
Work experience				
Dates	2008-now Consiglio Nazionale delle Ricerche (CNR)			
Occupation or position held	Research scientist			
Main activities and responsibilities	Applied and basic research, fund rising, project proposals and management			
Name and address of employer	Istituto di Scienze Marine (ISMAR)-CNR, 101, Via P.Gobetti 40129 Bologna Italy			
Type of business or sector	Research			
Dates	2007-2008			
Occupation or position held	Multibeam/Side Scan Sonar/Sub-bottom operator during cable survey			
Main activities and	Acquisition and Processing of marine geophysical			

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data, interpretation, charts production

responsibilities

Name and address of

employer

MSS International, Unit 1E — Block 71, The Plaza Park W Business Park Nangor Road, Dublin 12,

Ireland

Type of business or sector

Offshore-consultancy (Clients: Telepost-Tele

Greenland; Hybernia; Elettra)

Dates 2003-2007

Occupation or position

Research Assistant

Main activities and

responsibilities

Acquisition and Processing of marine

geophysical/geologic data, interpretation, analysis and management of data in a geographic information system-based environment, drawing up of reports and

chart description

Name and address of

employer

Istituto di Scienze Marine (ISMAR)-CNR, 101, Via

P.Gobetti 40129 Bologna Italy

Type of business or sector Marine Cartography

Dates July 2006

Occupation or position

held

Multibeam/Side Scan Sonar/Sub-bottom operator

Acquisition and data interpretation in a volcanic

during geothermal energy explorative survey

Main activities and responsibilities

marine area

Name and address of employer

PRAMA s.r.l. 5, Piazza Stamina, 60100 Ancona, Italy

Type of business or sector Offshore consultancy (Client: Eurobuilding)

**Education and training** 

1998 Dates

Title of qualification

awarded

SOCRATES-Mercator diploma

Principal subjects/ occupational skills

covered

Paleoceanography and Climate

Name and type of

organisation providing education and training

University of Kiel, Germany

Das Leibniz-Institut für Meereswissenschaften an der

Universität Kiel (IFM-GEOMAR)

Level in national or

international classification

SOCRATES-Mercator diploma

1999 Dates

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Title of qualification

awarded

Graduation in Geology

Principal subjects/ occupational skills

covered

Name and type of University of Bologna, Italy Earth and Geological-**Environmental Sciences Department** 

organisation providing education and training

Level in national or international classification 110/110 cum laude

Geology

1999-2000 Dates

Principal subjects/ occupational skills

covered

Multichannel seismic processing

Name and type of organisation providing education and training

Das Leibniz-Institut für Meereswissenschaften an der Universität Kiel (IFM-GEOMAR)

Level in national or international classification

6-weeks-stage at the IFM-GEOMAR) within the European Union IV Frame Programme of Training and Mobility of Researchers (TMR). Training in seismic

processing with software Kirkpack

2000 Dates

Principal subjects/ occupational skills

covered

Marine Geophysics

Name and type of organisation providing education and training

University of Southampton, United Kingdom Southampton Oceanography Center (SOC)

Level in national or international classification 3-weeks-stage at the SOC in the framework of the European Union IV Frame Program Access to Research Infrastructure, HPRI-CT-1999-00047, training in processing and interpretation of sonar data acquired by Towed Ocean Bottom Instrument (TOBI)

Dates 2001

Principal subjects/ occupational skills covered

Marine Geophysics

Name and type of organisation providing education and training

IFM-GEOMAR Das Leibniz-Institut für Meereswissenschaften an der Universität Kiel

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4-weeks-stage at IFM-GEOMAR in the frame of the European Union V Frame Programme Improving Human Potentials (IHP), Marie Curie Actions). Processing (pre-stack depth migration) and interpretation of deep seismic data

Dates 2002

Title of qualification awarded

Ph.D. in Earth Sciences

Principal subjects/ occupational skills covered Marine Geology and Geophysics; Iberian Atlantic margin; Eurasia-Africa plate boundary; tsunami seismogenic sources; seismic hazard assessment

Name and type of organisation providing education and training

University of Bologna, Italy Earth and Geological-

providing Environmental Sciences Department

Dates 2009

Title of qualification awarded

HIPS & SIPS 7.0 training course diploma

Principal subjects/ occupational skills covered

Multibeam and backscatter data processing

Name and type of organisation providing education and training

**CARIS BV** 

Dates 2010

Title of qualification awarded

SIS EM710-3002 Operator course diploma

Principal subjects/occupational skills

covered

Multibeam and backscatter data acquisition

Name and type of

organisation providing education and training

Kongsberg Maritime

## Personal skills and competences

Mother tongue(s) Italian

Other language(s)

Self-assessment	Understanding		Speaking		Writing
European level (*)	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Spanish	B1	B1	B1	B1	B1
French	B1	B1	B1	B1	B1

<sup>(\*)</sup> Common European Framework of Reference for Languages.

## Organizational skills and competences

She participated in redacting proposals of then funded Research European projects (FP, ESF, IPA, EMODNet) among them BIGSETS, SWIM, ESONET, EMODNet Seabed Mapping, Hydrography and Bathymetry, H2020 VRE E-BISS and national programs, such as PRIN and FIRB, MaGIC (Marine Geohazards Along the Italian Coasts), CARG (Italian Geological mapping). She has been in charge of producing deliverables, writing project reports and the organization of workshops. She is used to give talks in front of the audience. She is used to work in challenging situations such as on board marine vessels and in the field. She is in charge of several tasks, WP and actions in the frame of different projects, among them: MaGIC (Marine Geohazards along the Italian Coasts) www.magicproject.it, EMODNet Bathymetry http://portal.emodnet-hydrography.eu/, Ritmare www.ritmare.it, CARG www.ispram biente.gov.it/Media/carg/index marine. html.

**1998-2001** Participation in the European Union BIGSETS project (Big Sources of Earthquakes and Tsunamis in SW Iberia), IV frame programme.

**2000-2002** Participation in the MURST Cofin 40% project: Struttura ed evoluzione del margine atlantico sud-iberico: tettonica neogenico-recente ed interazione con le porzioni esterne dell'Arco di Gibilterra mediante indagini di sismica a riflessione superficiale e profonda.

**2000-2003** Participation in the ESF-Euromargins SWIM project (Earthquake and Tsunami hazards of active faults at the South Iberian Margin: deep structure, high-resolution imaging and paleoseismic signature). Participation in the European Union ESONET project European Seafloor Observatory Network (ESONET), V frame programme.

**2003-2011** Participation in the national APAT-CARG marine cartography project: "Cartografia Geologica dei Mari Italiani alla scala 1:250.000", she is in charge of the preparation, design and writing of the accompanying notes of the 5 sheets of the Adriatic Sea.

2008-2012 She is in charge of the operations at sea and the scientific/technical support for the 10 Tyrrhenian sheets that are the deliverables of the MaGIC project

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(Marine Geohazards along the Italian Coasts) to be realized by ISMAR UOS Bologna.

**2009-2013** Task leader of the TA.P05.022 "Geomorfologia dei margini continentali per la mitigazione dei rischi geologici".

**2010** Participated in the drafting of the proposal Ocean World "Ocean deepwater multi-purpose offshore platforms for an innovative and sustainable World" for the FP7-OCEAN-2011 call, coordinated by Nadia Pinardi, University of Bologna.

**2010-now** She is leading the ISMAR contribution to the EU tender pilot project EMODNet (European Marine Observation and Data Network), Hydrography, Seabed Mapping, Bathymetry, 1° and 2° phases, coordinated by MARIS. Regional coordinator for the creation of the 250-m-resolution DTM of the European Seas. She is participating in the SLOPES and PRAACS (Predicting Reservoir Architectures in Deepwater Settings) programmes funded by a consortia of oil companies and coordinated by the University of Aberdeen.

**2012** ISMAR PI for the proposal PRIN 2010-2011 GeSIC project coordinated by Università di Milano Bicocca. ISMAR PI for the proposal ODEON (Open Data Exchange and Organisation Network) call FP7-SCIENCE-IN-SOCIETY-2012-1 Part 5, coordinated by Miguel Ángel Sicilia, Universidad de Alcalá de Henares, Spain. ISMAR PI for the proposal IPA CBC ADRIATIC — 2nd Call Priority 2 Measure 2.1 "Protection and enhancement of the marine and coastal environment", coordinated by Consorzio Nazionale Interuniversitario per le Scienze del Mare (CONISMA), Università del Salento.

**2011-now** Action leader of the Ritmare SP4 WP1 A3 Marine Georesources.

2013 Organization of the GEBCO (General Bathymetric Chart of the Oceans) 2013 conference, 7-11 October 2013, Venice. Annual meetings of the GEBCO Guiding Committee (GGC), Technical Sub-Committee on Ocean Mapping (TSCOM), Sub-Committee on Regional Undersea Mapping (SCRUM) and Nippon Foundation/GEBCO Training Project Management Committee (NMC) were held at Institute of Marine Sciences (ISMAR) headquarters in Venice. These meetings, under the auspices of IHO and the United Nations Educational, Scientific and Cultural Organization (UNESCO-IOC), included also the GEBCO Open Science Day, convener Marzia Rovere.

**2013-2015** ISMAR PI for the proposal FP7-PEOPLE-2013-ITN (SLATE — Submarine LAndslides and Their impact on European continental margins) coordinated by Katrin Huhn University of Bremen, Germany.

2014 Workshop/Short course "Georesources in Horizon 2020. Perspectives of deep sea and continent exploration/exploitation and recycling of Non-Energy Raw Materials" held on 9 September 2014 during the biannual SGI-SIMP joint conference in Milan. Organizers: Michael Marani, Marzia Rovere, Fabiano Gamberi, Institute of Marine Sciences (ISMAR) and Roberto Braga (University of Bologna). Coordinated the offer for the STOA study on: Technology options for deep seabed exploitation, Tackling economic, environmental and societal challenges; IP/G/STOA/FWC-2013-1 LOT 3 Environment, including climate change. Coordinated the technical offer for the tender "Piano Operativo Per L'individuazione Di Giacimenti Di Sabbia Sottomarini Utilizzabili Per II

Ripascimento Artificiale Dei Litorali Sabbiosi In Erosione Della Regione" P.O.R. PUGLIA 2000-2006 — FESR — CIG: 57930987B2, CUP: H31I13000010002

2015 ISMAR PI for the proposal H2020-EINFRA-2015-1 Research and Innovation action, E-BISS: Eresearch infrastructure in Bathymetry, Imagery, Sonar and Seismics. EINFRA-9-2015. She is evaluating the participation into one of the KAVA-KIC Raw Matters proposals http://eit.europa.eu/eit-community/eit-raw-materials in the Network of Infrastructure subject. Acquisition, post-processing and interpretation of marine geophysical and geological data acquired on board ships and vessels (multichannel and single channel seismic reflection MCS/CHIRP/SBP, side scan sonar (SSS), multibeam MBES, magnetic, gravimetry, coring and box coring, oceanographic and chemical parameters). Geochemical and isotopic analyses interpretation.

#### Computer skills and competences

Excellent skills within Linux, Unix, Windows and Mac environments. Programming: Perl, shell utilities, HTML. Software ArcGIS-ESRI; CARIS HIP & SIPS, QPS-Fledermaus, Ifremer-Globe, Caraibes, Neptune-Kongsberg, Multibeam Manager-Pangea, PDS2000-Reson Inc., Caraibes. Oasis Montaj-GeoSoft, Focus-Paradigm Inc., Kirkpack, Seismic Unix. Erdas-Leica Geosystems, ENVI-ITT, GeoSurvey Productivity Suite-CodaOctopus Ltd., TEI Suite-Triton Imaging Inc; SwanPro-Communication Technology, Delph Seismic-Triton Imaging Inc., GMT, Surfer-Golden Software Inc.; AutoCAD; Adobe Illustrator, Photoshop.

## Dissemination skills and competences

#### Social skills and competences

She regularly participates in initiatives of outreach and scientific dissemination, including the Researchers' Night and the "Festival della Scienza", in particular during the 21 October-2 November 2011 exhibition held in Genoa. She appeared in TV programmes such as, Rai 3 "Mediterraneo", episode broadcasted on October 6th 2013, where ISMAR research scientists talked about marine georesources and geohazards in the Italian Seas while onboard the R/V Urania and France 3 "Thalassa" aired on 21st November 2014, centered on submarine volcanoes of the southern Mediterranean Sea. She participates in Citizen Science and Science in Society project proposals about the scientific information, data accessibility, data dissemination and conservation, use. Early after her graduation, she has worked in natural science museums organizing free learning activities for pupils of primary and secondary schools. In 2003 she won a scholarship to attend a MSc in Natural Science Communication, University of Parma, Italy. In 2004 she wrote the essay: Effetti collaterali di un goffo tentativo di emulazione del comandante Jacques-Yves Cousteau, published in Cervelli in Gabbia, Avverbi Eds. In recent years she devoted her attention to the study of the native populations of North Africa. She was leading member of the steering committee of the meeting: Maghreb: 600 hundred years after Ibn Khaldoun, held in Rome in 2006 and sponsored by Presidenza del Consiglio della Regione Lazio. She is adviser of several undergraduate, MSc and PhD projects, concerning a variety of topics: grain size and susceptibility analysis on deep sea sediment cores, geomorphometry of mass transport deposits and canyon and slope channel systems; deep confined turbidite systems, cold seep habitats, backscatter analysis, seismostratigraphy, marine geochemistry. She has been

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responsible for training young people both in the laboratory and on board. She owns a good problem solving attitude, such as successfully matching short-coming and tight deadlines. For her long-time habits of travelling through undeveloped countries around the world and participating in ethnographic expeditions, she is used to come in touch and cooperate with people of different ethnic identities, languages and cultures.

#### Additional information oceanographic cruises

Between 1998 and 2015 she participated, as acquisition technician, scientific ship party member and chief scientist, in oceanographic cruises in the Mediterranean Sea, Atlantic Ocean and Arctic Ocean.

**1998** 30/10-07/12 BIGSETS cruise on board N/O Urania, offshore SW Portugal as junior scientist. MCS acquisition.

**1999** 29/06-03/08 TOBI-AZZORRE99 cruise on board N/O Urania, Azores Islands, SSS acquisition in a submarine volcanic context.

**2000** 18/05-30/05 PARSIFAL campaign aboard B/O Hespérides, offshore SW Portugal and Gulf of Cadiz. MBES acquisition, OBS deployment, wide-angle seismics; 13/07-28/07 TTR-10 cruise (*Training Through Research, Floating University*, funded by UNESCO) aboard R/V Professor Logachev. SSS (Okean and ORE-Tech technology) acquisition, single-beam reflection seismics, TV grabbing, coring.

**2002** 20/11-23/12 VOLTAIRE cruise, aboard N/O Urania, Moroccan and Portuguese waters. MCS acquisition.

**2004** 22/06-27/06 MATESPRO cruise, on board R/V Don Carlos I, Portuguese Atlantic waters. MBES acquisition under IOC-IHO standards; 12/07-21/07 VENICE 2004 campaign, on board N/O Urania, northern Adriatic Sea. CHIRP acquisition and coring.

**2005** 17/03-26/03 VENICE 2005 campaign, on board N/O Urania, northern Adriatic Sea. CHIRP acquisition and sediment coring; 06/10-14/10 SADRI05 campaign aboard N/O Urania, southern Adriatic Sea. CHIRP and MBES acquisition.

**2006** 20/04-27/04 HERMES06 EU Program on board N/O Urania, offshore South Sicily. CHIRP and MBES acquisition;

06/05-12/05 SETE06 cruise on board N/O Urania, southern Adriatic Sea, CHIRP and MBES acquisition;

10/07-22/07 PROMETHEOUS cruise aboard R/V Universitatis, Thyrrenian Sea (Marsili Volcano). CHIRP and MBES acquisition, grabbing and coring;

25/08-07/09 TAORMINA 2006 cruise on board N/O Urania, Messina Straits and Etna offshore. MCS, CHIRP and MBES acquisition.

**2007** 09/02-20/02 SADRI07 campaign aboard N/O Urania, southern Adriatic Sea. CHIRP and MBES; 26/03-05/04 BARCA07 cruise aboard N/O Urania, southern Adriatic Sea. CHIRP and MBES, Box Coring; 8/08-11/10 Greenland Connect and Hybernia pre-cable surveys aboard R/V OGS-Explora, offshore Greenland, Newfoundland, Icelandic waters. SSS/SBP, MBES, coring.

**2008** 11/02-29/02 Mena pre-cable surveys aboard R/V OGS-Explora, Mediterranean Sea. MBES; 13/05-23/05 SASSI08 on board N/O Urania, Adriatic Sea. CHIRP and MBES; 04/06-10/06 GARGANO 08 on board N/O Urania, Adriatic Sea. CHIRP and MCS seismics.

**2009** 03/03-30/03 ADRIASEIS09 on board N/O Urania, Adriatic Sea. CHIRP and seismic oceanography (dense waters cascading); 25/07-08/08 MAGIC001-002 on board M/P Mariagrazia, southern Adriatic Sea. CHIRP and MBES in the frame of the MaGIC project. 23/09-07/10 CNR ISMAR01 on board M/P Mariagrazia, eastern Sardinian margin, **chief scientist**. CHIRP and MBES in the frame of the MaGIC project.

**2010** 16/02-28/02 MAGIC004 on board M/P Mariagrazia, eastern Sardinian margin, **chief scientist**. CHIRP and MBES in the frame of the MaGIC project; 26/04-14/05 CNR-ISMAR0410 on board M/P Mariagrazia, southern Tyrrhenian Sea, **chief scientist**. CHIRP and MBES in the frame of the MaGIC project; 01/06-10/06 TORDE10 on board N/O Urania, southern Tyrrhenian Sea. CHIRP, MBES, coring on deep turbidite and debrite systems.

**2011** 22/06-07/07 MAGIC007 on board N/O Urania eastern Sardinian margin, **chief scientist**. CHIRP and M888BES in the frame of the MaGIC project; 26/08-08/09 MVP11/MAGIC-ISMAR-0911 on board N/O Urania, southern Tyrrhenian Sea, **chief scientist**. CHIRP and MBES, coring, box coring, water column acoustics detections on top of cold seep sites.

**2013** 25/02-28/02 seismic CHIRP and Multibeam acquisition on a marine landslide onboard N/O OGS Explora in the frame of Ritmare project SP4 WP1 A2. 15/08-28/08 CAT13 on board N/O Urania, southern Tyrrhenian Sea. CHIRP, MBES, coring and box coring on channel-levee systems and mass transport complexes. 24/10-30/10 bathymetry and backscatter acquisition in the Venice Lagoon on board the Litus vessel.

**2014** 13/06-25/06 MarBeep 2014 on board N/O Urania, southern Tyrrhenian Sea, **chief scientist**. CHIRP and MBES, coring, box coring, MCS seismics, water column acoustics detections, water sampling on top of cold seep and hydrothermal vent sites and on a mass transport= complex. 9/10-01/11 M111 Dyonisous on board R/V Meteor, Ionian Sea, OBS and wide angle seismics for deep crustal imaging of the continental-oceanic transition.

**2015** 30/04-14/05 LSD2-15 on board N/O Minerva Uno, Adriatic Sea, piston coring and vibrocoring on clinoforms of the last low stand delta of the Po river.

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