The MEBE Programme is entering its final year, a year that will be exclusively devoted to syntheses and to the preparation of the MEBE Database. After the first two years being dedicated to data acquisition through 26 scientific projects, in 2005 we initiated the synthesis stage and developed the structure of the Database. Our budget reflects the new orientation of the programme. In 2005, funding devoted to scientific projects represented about half the preceding year’s budget: we supported only 18 of the 26 scientific projects funded in 2003 and/or 2004. A large part of the budget was allocated to the MEBE Database and to the incipient syntheses.

The regional and thematic syntheses will develop through the 8 MEBE Working groups established in 2005. The MEBE Working groups are either regional (Zagros, South Caspian Basin and Central Iran, Caucasus, Black Sea, Levantine and South-eastern Arabian margins) or thematic (Stratigraphic correlations, Lithospheric Cross-Sections). They include MEBE participants as well as other regional and thematic specialists. The syntheses will be based on the new information sets obtained from the MEBE projects, as well as previously published data. The first meetings of the working groups were held during the second semester of 2005 and will be continued in early 2006. In 2006, many meetings will be organized either in Europe or in the Middle East. For each group, one two-day symposium will be organized in 2006, including scientific presentations and discussions. The “Black Sea Working Group”, led by R. Stephenson from the Free University of Amsterdam organized the first regional symposium in Kyiv in February 2006 and is reported in these News. The objective of each working group is to produce a synthesis available at the end of the Programme.

There is increased interest among geoscientists in developing digital GIS databases with the necessary tools to exploit the diversity of existing datasets as a basis for regional- or local-scale studies. We are building such a GIS relational database (MEBE Database) as an aid to geological research on the Middle East. The MEBE GIS Database is being structured in a way to integrate relevant geological data (1) collected during the MEBE Programme and (2) already published and having relevance to the Middle East. It aims at providing an interactive interface between the MEBE data and syntheses and users. Our MEBE Database combines digital topographic and geological information. The database
includes any kind of tectonic, stratigraphic, sedimentological, and geochronological data for the Arabian, Iranian, Caucasian and Black-Sea domains. Most of the geological information of the MEBE Database is presented through local and/or regional syntheses. The MEBE database is not restricted to raw data but includes interpreted data, such as cross-sections, biostratigraphic charts and documents, subsidence curves, paleostress maps, stratigraphic charts and logs, sedimentological logs and maps, tectonic logs and maps, stratigraphic charts, geological maps, ... It is being developed using Microsoft Access and ESRI ARCGIS9 and is a tool for geoscientists examining the geological and geodynamic evolution of the Eurasian, Arabian and African lithospheres in the Middle East since the Mesozoic. Upon completion, the MEBE Database will also act as a tool for geoscientists studying in the Middle East.

In addition to the MEBE Database and the MEBE working group syntheses, a set of palinspastic reconstructions, including the major tectonic and geodynamic features and sedimentological facies, are to be proposed. An atlas of 14 maps, ranging in age from Late Triassic to Pliocene, will be prepared in A2 format (scale 1/13,000,000).

Eric Barrier and Maurizio Gaetani
MEBE co-leaders

**THE BLACK SEA WORKING GROUP**

Randell Stephenson, Amsterdam

The tectonic history of the Black Sea and the geodynamic processes governing its formation and evolution comprise the subject of MEBE’s Black Sea Working Group (BSWG), which combines five MEBE projects that were active during the first years of MEBE. Four of these involved new geological fieldwork on the onshore margins of the Black Sea and one dealt mainly with new geophysical and modelling studies of the Black Sea basin itself (Fig. 1). The BSWG met with other interested scientists in Kyiv on 8-11 February to discuss their mutual scientific results and to plan how the synthesis of these results will be carried out during the last stages of MEBE. The Kyiv workshop involved some 30 scientists, including MEBE project leaders and participants from all countries bordering on the Black Sea (Ukraine, Russia, Georgia, Turkey, Bulgaria, Romania) as well as France, Italy, Norway, and Netherlands. About 10 scientists from the host organisation – the Institute of Geophysics of the National Academy of Sciences of Ukraine also participated as well as several representatives from MEBE sponsors, specifically Shell, ENI, and Petronas.

The scientific programme of the workshop comprised two days of presentations and discussion and a third (half) day of planning sessions. The scientific
themes of the BSWG were defined in 2005 as (1) the widespread Mid-Eocene and younger shortening that affects almost all of the study area, including the northern and southern margins of the Black Sea; (2) Cretaceous-Paleogene extensional tectonics, including the main phase of development of the Black Sea basins themselves; (3) the significance of Cimmerian “Orogeny” tectonics throughout the study area, as expressed by the widespread occurrence of various Late Triassic-Jurassic aged unconformities; and (4) the role of pre-Cimmerian tectonics in controlling the subsequent deformational history of the Black Sea area. The workshop programme reflected these themes and included the following presentations (showing country affiliations, non participating authors italicised):

- Welcome and introductions to participants by Vitaly Starostenko (UA) and Randell Stephenson (NL)

- Overview of the MEBE Programme and the MEBE Database by Eric Barrier (F)

- The MEBE Black Sea Working Group: background, highlights, objectives, outcomes by Randell Stephenson (NL)

- Programme of investigation for the regional study of structure and evolution of the Ukrainian offshore 2006-2010 by S.M. Stovba (UA)

- Basement fault systems on the NW shelf of the Black Sea from potential fields and other geophysical data: tectonic implications and relevance to hydrocarbon occurrence by V.I. Starostenko, I.K. Pashkevich, O.M. Rusakov, I.B. Makarenko, R.I. Kutas, O.V. Legostaeva, and S.M. Stovba (UA)

- Geothermal conditions in the north-western part of the Black Sea by R.I. Kutas (UA) and J. Poort (B)

- New data on the stratigraphy of the Odessa shelf by O.I. Khriachtchevskaia, K. Plotnikova, N. Maslun, and N. Yakushin (UA)

- An overview of the tectonic evolution of the Northern Dobrogea-Crimea Greater Caucasus belt of the northern margin of the Black Sea and the significance of extensional structures at various stratigraphic levels by Aline Saintot (N)

- Stratigraphic evidence of Cimmerian deformations in the NW Caucasus by M. Gaetani (I)

- Eastern Black Sea region: tectonic history and hydrocarbon potential modelling by A.M. Nikishin and A.V. Ershov (RU)

- The main opening of the Eastern Black Sea Basin: timing and mechanism by Michel Sebrier (F), Shota Adamia (GA), and Juliette Lamarche (F)

- Correlations of main tectono-sedimentary units between Eastern Black Sea and Caucasus-Eastern Pontides by Shota Adamia and Alexandre Chabukiani (GA)
- Basin evolution and inversion in the Bulgarian part of western Black Sea by G. Georgiev, Ch. Dabovski, and Ch. Dimitrov (BG)

- Structural characteristics of the Paleogene deposits from the Istrija Depression, Romanian Black Sea Shelf by Corneliu Dinu and Dorina Tambrea (RO)

- Neogene tectonic evolution of Romanian Black Sea shelf by Corneliu Dinu (RO), H.K. Wong (D), and Dorina Tambrea (RO)

- Triassic and Early Cretaceous accretionary tectonics in the Central Pontides, Turkey by A.I. Okay, O. Tüysüz (TK), M. Satır (D), S. Özkan-Altıner, D. Altıner (TK), and S. Sherlock (UK)

- General geological characteristics of Pontides: inferences for the evolution of the Black Sea basin by Y. Özcelik, A. Demirer, and N. Kaymakci (TK)

- Cretaceous-Pliocene stress field evolution in the Pontides, northern Turkey by J.-C. Hippolyte (F), N. Kaymakci (TK), C. Muller (F), and E. Sangu (TK)

- Opening and closure of the Tethys oceans: Mesozoic geodynamics around the present-day Black Sea by M.J.M. Meijers, R.A. Stephenson, C.G. Langereis (NL), A. Saintot (N), and V.G. Bakhmutov (UA)

- P-wave tomography model the upper mantle in the Black Sea area by V. Geyko, I. Bugaienko, T. Tsvetcova, L. Shumlyanska, and L. Zayets (UA)

- Project DOBRE-2: deep seismic reflections, DSS studies and gravity modelling of the crust and upper mantle of the Azov Sea and Black Sea transition zone and Crimea by V.I. Starostenko, V.D. Omelchenko, T.P. Yegorova, A.P. Tolkunov, O.G. Tchjoha, E.P. Baranova, V.V. Sirchenko, and O.V. Legostaeva (UA)

- Crustal structure of the Black and Azov seas according to reinterpretation of seismic (DSS) data and gravity modelling by T.P. Yegorova and E.P. Baranova (UA)

- The Scythian Plate and the pre-Mesozoic history of the Black Sea area by Randell Stephenson (NL) and Aline Saintot (N)

The MEBE Black Sea Working Group decided at the Kyiv workshop to prepare the “third Black Sea monograph” (following the 1988 Bollettino di Geofisica Special Volume of I. Finetti and the 1997 AAPG Memoir of A. Robinson). It was agreed to try to publish this as part of a book series rather than a Special Volume of a journal. Besides an anticipated 15-20 contributions reporting specific results of the various MEBE projects that worked in the Black Sea region (comparable but not equivalent to the Workshop contributions as listed above), commitments were established for six synthesis chapters. These are:

- Rifting and basin formation processes in the Black Sea: comparison with modern back-arc basin analogues (Randell Stephenson, Vrije Universiteit, Amsterdam)

- Lithospheric structure of the Black Sea area (Vitaly Starostenko and Tamara Yegorova, Institute of Geophysics of the National Academy of Sciences of Ukraine, Kyiv)

- Review of subsidence models of the Black Sea: implications of the new MEBE results (Andrey Ershov, Moscow State University, Russia, and Oxana Khriachtchevskaia, NaukaNaftogaz, Kyiv)

- Evolution of the active margin of the Black Sea area from the Triassic to the present (Michel Sébrier, CNRS, Université Pierre et Marie Curie, Paris, and Aral Okay, Istanbul Technical University)

- Tectonic styles and basin inversion processes during the Cenozoic in and around the Black Sea (Cornel Dinu, University of Bucharest and Sergiy Stovba, NaukaNaftogaz, Kyiv)

- Paleostress evolution and kinematics of circum-Black Sea Region (Nuredin Kaymakci, Middle East Technical University, Ankara, and Jean-Claude Hippolyte, CNRS, Université de Savoie, Chambery)

Provisional co-ordinating authors are indicated in parentheses; in the event these synthesis papers will all be co-authored by multinational, multidisciplinary teams of MEBE project participating and other scientists. Deadlines have been set such that the constituent chapters of the BSWG synthesis volume will be prepared as part of the MEBE Final Report to sponsors at the end of 2006 and will then immediately begin a peer review and revision process leading to publication of the (MEBE) 3rd Black Sea Monograph by early 2008.

Finally, it remains to be express a tremendous “thank you” to the MEBE workshop hosts in Kyiv, specifically Vitaly Starostenko and Olga Legostaeva of the Institute of Geophysics, who ensured that everything ran smoothly and who were so very attentive of all the needs of workshop participants. The efforts of all the persons in Kyiv who helped make the workshop a success, helpers and drivers included, are very greatly appreciated.
Why a GIS Database on the Middle East Geology

Those last ten years, there was an increased interest among geoscientists in developing digital GIS databases to exploit the diversity of existing geological data. GIS capabilities for spatial resolution, manipulation, and scattering of diverse types of geological data can increase our capacity for regional and/or interdisciplinary researches. Only a database system is able to help the geoscientists to classify, retrieve and treat such an amount of data.

It is essential to integrate data and models from a wide variety of disciplines. In order to develop a comprehensive model for the tectonic evolution of the Middle East since Mesozoic, the MEBE group is developing a GIS database, the most appropriate system to reach this objective. The Database is one of the products of the MEBE programme. It is an essential tool in this endeavor.

Our data set also includes information about the geological evolution of the Middle East from Mesozoic to Quaternary, mainly concerning tectonics, stratigraphy, and geophysics. (Fig. 1).

Database team

The MEBE team in charge of Database is composed of scientists from the “Centre National de la Recherche Scientifique” and the “Université Pierre and Marie Curie” and from the Friburg University. The participants respond to the major constrains of databases: technical and scientific. It includes database specialists, cartographers, tectonicians, stratigraphers and geophysician. Namely: Bruno Vrielynck – CNRS, Database Manager; Eric Barrier – CNRS; Françoise Bergerat – CNRS; Martin Bochud - Friburg University; Jean-François Broillet – CNRS, Marie-Françoise Brunet – CNRS; Isabelle Morgant - P. & M. Curie University; Danièle Pasquier - P. & M. Curie University

The MEBE database is being developed and hosted at the «Laboratoire de Tectonique», P. & M. Curie University, Paris (France)

Objectives

- Report the scientific MEBE data set in an integrated GIS database;
- Develop an interpreted regional database integrating relevant geologic, geophysical and geodynamic data bearing on Middle East.

Basic Idea

The MEBE relational database was devised to integrate the geological data collected, and synthesized during the Middle East Basins Evolution Programme (MEBE). It aims at providing an interactive interface between the MEBE observations, analysis and syntheses and the users.

Because the development of various models and reconstructions that explain the evolution of vast geological domains such as Middle East require a complete interdisciplinary data set, we have extended the data-collection to selected published data.

The MEBE Database mainly gathers already interpreted and/or synthesized data. Raw data also exists. They are generally presented and accessible through an interactive process where the analytic results and syntheses are illustrated by various types of documents immediately accessible.

Upper completion the MEBE database will act as a tool for geoscientists examining the

Fig. 1 - The area covered at various levels of information by the MEBE Database.
Fig. 2 - Geological map superposed on the DEM of part of Lebanon and Syria, with the position of the paleostress measures.

Fig. 3 - Comprehensive log of the Coastal Range in Syria, with major depositional and deformational events.
geological and geodynamical evolutions of Middle East. It will provide attractive data about the evolution of Eurasian, Arabian and African lithospheres since Mesozoic in the context of the closure of the Tethyan oceanic, and then in Cenozoic of the collision of the African-Arabian plate with Eurasia.

Data sets
The MEBE database includes geological, topographical and geophysical data for the Arabian and Eurasian platforms and margins, and the Africa-Eurasia collision zone. The database gathers in priority tectonic, stratigraphic, sedimentological, geochronological data for the Middle East revisited during the field works of the MEBE Programme. The MEBE Database includes (1) Digital maps database, and (2) all kind of geological data.

The geological data are mainly already interpreted data. They synthesize our observations and analyses. They describe the evolution of Middle East from the end of the opening of the Tethyan Ocean in Triassic to its closure in Late Cenozoic. Thus the MEBE database is not restricted to raw data like many databases. Nevertheless, the raw data collected during the MEBE Programme are also included in the linked tabular database.

The database contains data collected within the MEBE scientific projects and working groups as well as already published data. In agreement with the authors, we incorporated important and demonstrative already published works, selected from the literature (theses, articles and reports). (Fig. 2, 3, 4, 5, 6).

Schedule
- 2005: Start up phase
  Object definition
  Database structure
  Link to GIS
  Basemaps elaboration
  Beginning of data collection
- 2006: Development and data collection
  Data collection in collaboration with authors
  Implementation of the specific tools

In 2006, we will be adding additional data, as well as bringing new specific tools.

Choice of the System
The MEBE Database is being developed using Microsoft Access as database manager and ArcGIS v.9 from ESRI. This GIS system is now currently used in geosciences.

Specific tools: We refine and develop discipline-specific and integrated tools to exploit the diversity of datasets. More particularly, filters developed in VBA and Python will be available to help the users in their request (e.g. on age and domain).

Exportation of documents: All documents of the Database can be exported in jpeg format (300 dpi).

Database Structure
The MEBE spatial database combines (1) digital topographic, bathymetric and geological maps, and (2) various types of original geological information concerning the Mesozoic to present geological evolution of Middle East (s.l.).

1- The digital basemaps include topographic and geological maps
   Topographic maps: we used 2 distinct DEM generated from Shuttle Radar Topographic Mission data set (SRTM) with spatial resolutions of 30” (900m) and 3” (90m) respectively. We will equally use more precise local DEM when available; (Fig. 2, 5),
   Bathymetric maps: we use a DEM generated with the...
GEBCO (General Bathymetric Chart of the Oceans) dataset. We use the level 0 as coastline;

Geological georeferenced maps: we have compiled published geological maps for the Middle East at scales ranging from 1/200 000 to 1/1 000 000. These maps have been scanned and georeferenced, using Global Mapper Software. Most of the maps are stored as georeferenced raster files (jpeg format), whereas some are in digital format.

SRTM files and GEBCO files have been worked with ArcInfo (ESRI). Tools have been developed to achieve the treatment. Any kind of georeferenced maps or images can be added to the set of basemaps (Remote sensing data, Geophysical maps, etc…).

2 - The data: 3 levels from regional to local data
1st order data are regional synthetic geological data including various types of regional logs, cross-sections, and maps;
2nd order data are mainly illustrations of synthetic data such as different kind of diagrams, local logs, and pictures;
3rd order data are detailed data, i.e. analytic tables, lists, diagrams, detailed pictures of various tectonic features, facies, fossils...

Most of recorded geological data are already interpreted data, such as cross-sections, biostratigraphical charts and figures, subsidence curves, paleostress maps, stratigraphic charts and logs, kinematic reconstructions, sedimentological and tectonic logs and maps, stratigraphic charts, etc...

Visualisation
A considerable amount of our efforts were dedicated to bring online manipulation and visualization tools that are available on desktop. The visualisation has to lead users to discover the field trips, the factual observations, the analysis and the syntheses.

Entering the MEBE GIS, user finds a topographic map of the MEBE area issued from the SRTM 30'. Specific icons characterizing maps, tectonic logs, stratigraphic logs, diagrams, paleostresses, cross sections, etc..., mark sites with data.

A tool has been developed to filter the data with the age of the event. The user may choose a time interval, then the events that occurred during this time slice are displayed.

Link with Palinspastic Reconstructions
The 14 palinspastic maps of the evolution of the MEBE domain since Mesozoic will be drawn in ArcGIS format. The data and illustrations presented in the MEBE database in the Present configuration will be incorporated in the palinspastic maps. They will be accessible by the same way than on the present-day map.

For the stable continental platforms the data will be defined by the coordinates. For orogenic belts and continental blocks such as in the Tethyan domain, either not controlled by a well define kinematics or strongly deformed, the data will be located following the basic idea selected for the reconstruction.
News from the Working Groups

Activities of the WGs are developing. Six regional and two thematic groups have as a common goal to produce syntheses. To this end, meetings are held, with smaller or larger number of participants, with the presence, if necessary of regional experts not directly involved in the MEBE programme. The final reports are scheduled to be ready for the end of the Programme and they will be accessible on the MEBE web site. All the groups, however, plans to prepare “Special Publications”, like a special volume of an international journal or of a series of memoirs. The structure of the special publications will be to have some general paper addressing the main topics followed by a number of papers developing specific matters. The WGs are oriented to have as dead-line for submitting manuscripts the last part of 2006 or the very early 2007. Since we have by our MEBE contract to keep one year of confidentiality, the time of reviewing, revision and editorial processes will just cover this leg and thus this timing perfectly matches the confidentiality requirements.

Black Sea WG (Leader R. Stephenson, Amsterdam). The meeting of Kyiv and the scheduled activities were reported extensively in the previous pages.

Caucasus WG (Leader M. Sosson, Nice). A meeting was held in Paris in mid-January 2006, with also the participation of S. Adamia from Georgia as regional expert. This WG has the important task to link analyses on the eastern part of the Black Sea with the activities in Azerbaijan that are also considered by the South Caspian WG. It is particularly devoted to the analyses of the collision zone along the active margin of Eurasia during the Mesozoic.

Recent fields investigations and the extensive compilation of previous data has allowed the reconstruction of the detailed tectonic evolution along a transect from Arabia to the Great Caucasus. The main tectonic phases responsible for basin evolution, for the obduction of two main oceanic domains during the Late Cretaceous (Lesser Caucasus and Bitlis areas), for the Paleogene collision of exotic blocks (of Gondwana origin) with the Eurasian active margin, and for the ultimate collision of the Arabia to the south are now clearly characterized. The WG has detailed stratigraphic and structural analyses to enable a new paleogeographic reconstruction of the Peri-Arabic and Eurasian margin domain from Arabia to the Great Caucasus.

South Caspian Basin and Central Iran WG (Leader M.F. Brunet, Paris). The second meeting of the South Caspian Basin WG was held in Paris on January 20th 2006, and it gathered 16 scientists working for 6 MEBE projects. Each project presented the results obtained during 2005. For 2006, we chose to operate syntheses through 3 sub-groups prior to making a general synthesis of the area: - Eocimmerian period (coord., A. Zanchi, Milano), Late Triassic - Late Jurassic time span (coord., F. Fürsich, Würzburg), Cretaceous - Present time span (coord., E. Barrier, M.-F. Brunet, Paris). At the same time, the data and results of the SCWG are feeding the database; one objective of the WG is to add geological maps of Iran as well as some non MEBE maps. For example, depth maps of key horizons in the north of the area provide a perspective view of the area (Fig. 1), even if data are scarce (Moho) or smoothed by the 3 D viewer.

Zagros WG (Leader P. Leturmy, Cergy). The aim of the WG is to present a synthesis of the tectonic evolution of the Zagros fold and thrust belt in Iran during the Cenozoic. An example of the activities and products is illustrated by the balanced cross-sections across the belt in Iran from the Main Zagros Thrust (MZT) to the Mountain Front Flexure (MFF). Along all the sections, it appears that the tectonic style is dominated by décollement folding in the Dezful as well as in the Zagros Simply Folded Belt. By contrast, ramp-related folds are developed in the High Zagros Belt. Even if a basal décollement exists everywhere in the Zagros
(made up of Hormuz salt layers or Lower Paleozoic shales), the surface geometry of folds and their wavelengths in Luristan, Dezful and Izeh zone is controlled by the presence and efficiency of intermediate décollement levels (from top to bottom: Gachsaran, Gurpi, Kazhdumi, Dashtak). The importance of these intermediate décollement levels in the tectonic style is well illustrated with the comparison between a section in the eastern Zagros and a section in the Dezful (Fig. 2).

In the final synthesis 5 balanced cross sections and their kinematic evolution will be presented as well as a map view of the kinematic evolution.

South-Eastern Arabian margin WG. (Leader C. Robin, Rennes). The purpose of this project is a sedimentological, tectonic and sequence stratigraphic study of the Iranian part of the Neo-Tethys margin in order to better constrain the effects of the tectonic and climate changes on the geometry of this margin. For the Mesozoic history, this study is based on (1) classical stratigraphy (lithostratigraphy and biostratigraphy), (2) sedimentology and (3) sequence stratigraphy. The major advances in our knowledge were i) dating that modify the previous interpretations of the area and ii) the sedimentology and the sequence stratigraphy. A similar study was previously carried out on the Neo-Tethyan paleomargin of Oman. In term of geodynamic evolution, the main differences are:

1) The absence of Late Jurassic (late Kimmeridgian–early Tithonian) deformation and truncation characteristics of the Oman paleomargin both on the shelf and on the deep-sea plain,
2) the occurrence of a major downward shift of facies during Aptian–Albian in Iran with resedimentation of the platform.

The absence of the Late Jurassic deformation in Iran can be explained by its origin, an intraplate deformation in response to the Indian Ocean sea-floor spreading. The Aptian–Albian downward shift in Iran might be a record of the plate kinematics reorganization between Africa/Arabia and Eurasia (Austrian phase).

Field work on the Cenozoic sequence of the Zagros Mountains has provided much original stratigraphic and sedimentological data about Paleogene and Neogene basin evolution. The results are of major interest not only for a better understanding of the Zagros orogeny, but also of the tectono-sedimentary evolution of adjacent basins. As such, this study should provide new concepts to improve our knowledge about the geodynamic context and evolution of the petroleum systems in the Zagros Folded Belt and Persian Gulf.

Levant WG (Leader C. Homberg, Paris). The purpose of the Levant group is to understand the detailed tectonic and sedimentary evolution of the levantine domains. The area of interest includes the levantine margin and basin, the Levant transform boundary, the northwestern Arabia platform, and the front of the eastern Africa-Eurasia collision zone. A first meeting was held on mid-February in Paris with participation of MEBE members and regional specialists. Several bilateral meetings were also held. The major issues that we treated are (1) the Mesozoic development and sedimentary architecture of the Levantine Basin and the Eastern Mediterranean Basin, (2) the Late Cretaceous and Cenozoic deformations associated with the closure of Neo-Tethys, and (3) the strike-slip and compressive movements during development of the Dead Sea transform fault system. Correlation of onshore and offshore data helped us to improve our knowledge on the timing and dynamics of opening of the Eastern Mediterranean Basin.

Part of the activity of the group in 2005 was also devoted to elaborate synthetic documents. We are building tectonic logs detailing the major tectonic events that affected the different levantine domains. To date, four tectonic logs and ten regional maps of stress fields have

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Fig. 2 - Comparison between a section in the eastern Zagros and a section in the Dezful.
been prepared. Maps of active faults for key periods are under construction. We also have elaborated twelve regional paleogeographic maps for the same period covering the levantine margin. Integration of data in palinspastic maps are under preparation.

Lithospheric Cross-Sections WG (Leader L. Jolivet, Paris). The working group met in Paris on December 6-7, 2005. The WG aims at constructing lithospheric-scale cross-sections in the area covered by MEBE and studying their evolution through time. Assuming that along the transect from Oman to the Aegean the overall structure results from the succession in time of a Late Cretaceous obduction, still visible in Oman, a progressive continental collision in the Zagros range that started around 30 Ma, and final crustal collapse in the Aegean, we hope to use this spatial evolution to elucidate the effects of each stage and discuss its dynamics. The time range is approximately 100 Ma-Present. In order to discuss the causes of the separation of Arabia from Africa some 30 Myrs ago we add one section across the Gulf of Aden (multichannel seismics and seismological data are currently being acquired). To build the cross-sections and describe their evolution through time we will use plate kinematic, gravity and geoid data to construct the base of the crust and the base of the lithosphere, geological and geophysical data to build the upper crustal structure, mantle structures derived from delay-time tomography to estimate the amount of subducted material and its geometry as a test of reconstructions. Responsibilities for the cross-sections are: S. Leroy & P. Huchon (Aden); P. Agard & S. Lallemant (Oman-Makran); F. Moutherau & O. Lacombe (Fars); D. Frizon de Lamotte (South Zagros); J. Verges (North Zagros); R. Oberhansli & M. Sebrier (Bitlis-Caucasus); J-C. Guezou (Central Turkey); L. Jolivet (Aegean).

Besides the reports that should be delivered to the sponsors, we will publish a series of articles in a well-distributed media such as the Geological Society Special Publications.

Stratigraphic correlations WG (Leader M. Gaetani, Milano). Part of the group met in Paris in mid January and other smaller scale meetings were also held elsewhere. Due to the very large time spans and to the area considered we may only have some spot results and correlations. The time slice Permian to earliest Cretaceous is covered in Alborz and Central Iran, through MEBE activities and previous knowledge. K Seyed-Emami from Teheran attended the meeting in Paris and actively cooperate on the Mesozoic part of the sequence. Many new data on litho- and biostratigraphy were obtained. Other WG teams are dealing with Jurassic and Cretaceous correlations between Zagros and Oman and Yemen. The Cenozoic of Zagros and the Jurassic-Cretaceous of the Levants are other topics that are presently developed. The Special Publication could be a Special Issue of Palaeogeography, Palaeoclimatology, Palaeoecology or a Memoir of GeoArabia.
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