RCMNS CONGRESS BUCAREST

SEPTEMBER 6, 1995

SNS BUSINESS MEETING

A business meeting of the Neogene Subcommission was called during the third day of the tenth Congress of the Regional Committee for Mediterranean Neogene Stratigraphy, organized by prof. **Florian Marinescu** and co-workers, in order to discuss the following agenda.

1. Results of Paleogene/Neogene definition of GSSP
2. Results of Gelasian GSSP definition (Postal Ballot)
3. Results of elections of new SNS Bureau (1996–2000) Postal Ballot
4. Subcommission membership
5. Results of Miocene/Pliocene Boundary workshop
6. Plans of activity for the definition of various Neogene GSSPs (short term)
7. Neogene Symposium 1996 (IGC Congress, Peking, China)
8. Any other business

The meeting was attended by Chairman **M.B. Cita**, General Secretary **J. Halmai**, voting members **R. Tsuchi** (Japan), **S. Iaccarino** (Italy), **R.H. Benson** (USA), **V. Semenenko** (Ukraina), **J. Martinell** (Spain) and **J.P. Suc** (France), by corresponding members **G. Valleri** and **R. Sprovieri** (Italy) and by other numerous scientists interested in the progress of SNS activities. Nationality of the various participants was widely widespread and included Romania, Russia, Ukraina, USA, Japan, the Czech Republic, Italy, Spain, France, Holland, Morocco.

At the beginning of the meeting, **Cita** announced with sadness the death of two SNS members: **N. de Hornibrook** (New Zealand) disappeared in 1994, and **Graham Jenkins**, chairman of the Paleogene Subcommission and a great friend and supporter of our activities, suddently died on August 6, this year.

The agenda was adopted as proposed and published in the Congress Program, as extra-Congress activity.

1. Results of Paleogene / Neogene definition of GSSP

The results of the definition of the GSSP for the Paleogene / Neogene boundary (= Oligocene / Miocene boundary) were presented by **S. Iaccarino**, an active member of the P/N Working Group.

The GSSP is located at m 35 of the Carrosio section in the Lemme valley (northern Italy), see Neogene Newsletter n. 1, pp. 17 – 21. Figure 1 shows the "critical interval" the WG was investigating, and fig. 2 the lithology and the major biostratigraphic events, plotted versus the GPTS.

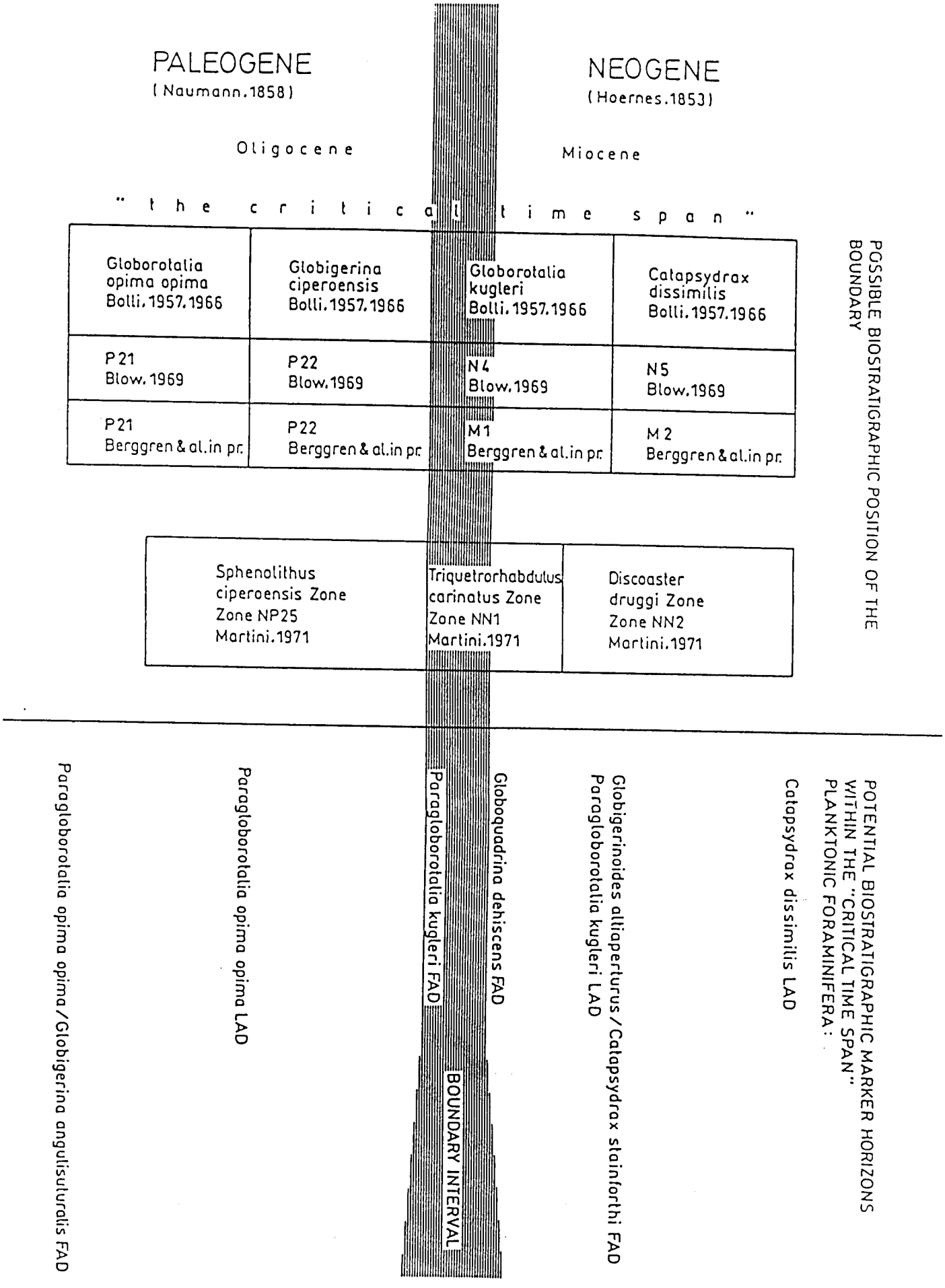

Fig. 1. The "critical time span" and the "boundary interval" – concept of the IUGS–ICS Working Group on the Paleogene / Neogene boundary.

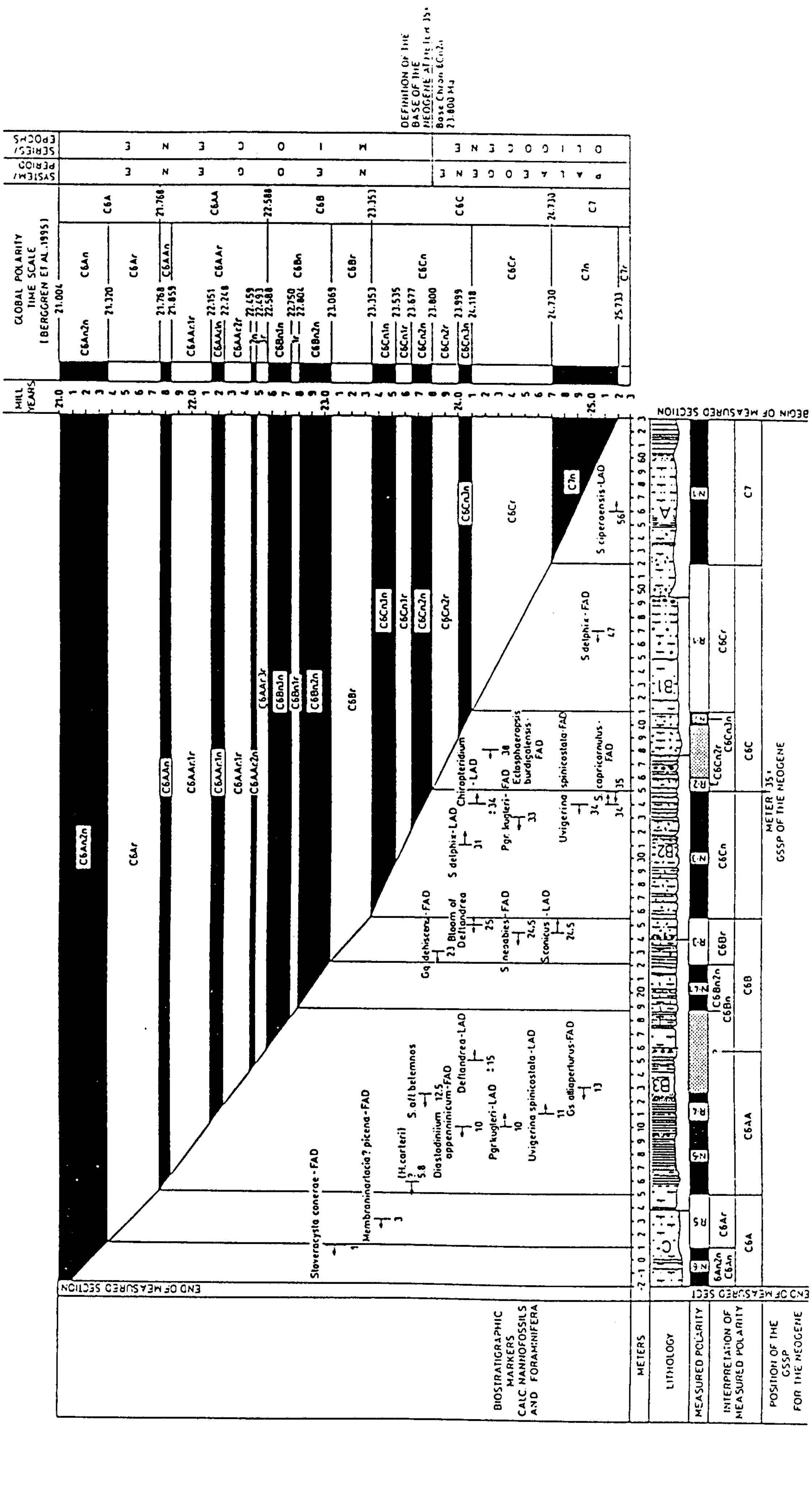

Fig. 2. Plot of the Cande & Kent (1992) resp. Berggren et al. (1995) Global Polarity Time Scale plotted versus the measured paleomagnetic polarity sequence, the lithology and the biostratigraphic events of the Lemme–Carrosio Section.

SNS chairman pointed out that the P/N Working Group was an indipendent body of ICS, with formally appointed members, prof. **F. Steininger** as chairman and dr. **F. Rögl** as secretary. It has been working for over 15 years, and only recently – as a result of the re-organisation of ICS – was incorporated into SNS. The proposal for the definition of the GSSP – as indicated above – has been first approved by the WG members, then approved by postal ballot by the large majority of the Paleogene and Neogene subcommissions. Now it is under postal ballot among ICS members (= chairmen of the various ICS subcommissions). A discussion followed, with questions raised by **Benson, Cita, Sprovieri** related to a) reasons why to choose a magnetic reversal as a major correlation tool; b) major biostratigraphic events and use of the *Globigerinoides* first appearance datum as an indicator for the base of the Miocene; c) Sedimentation rates in the Lemme section; d) lack of use of stage names in the definition of the boundary. To a precise question raised by **Benson** on where falls the base of the Aquitanian, **Cita** answered that the base of the Aquitanian clearly does not correspond to the P/N GSSP, and this is why all the french members of both subcommissions voted against the proposal.

2. Results of Gelasian GSSP definition (postal ballot)

The results of the postal ballot on the Gelasian (upper Pliocene) stage GSSP were presented by **Cita**. Of the 30 voting members of SNS, 13 voted yes, 11 did not answer (which, according to ICS rules, corresponds to a yes vote), and 6 answered no. The six are **Antunes, Benson, Martinell, Martinotti, Suc** and **Zachariasse**.
So, the proposal was approved by 80 % of the voting members, well above the 60 % quorum requested by ICS.

A discussion followed the presentation, with questions/comments by **Benson, van Couvering, Semenenko, Sprovieri, Suc**. Most noticed a certain hurry and lack of an in-depth discussion before launching the postal vote, and **Suc** explained why he influenced two voting members in casting a negative vote. Being at the same time member of SNS and of the INQUA Commission on Stratigraphy, that wants to lower the base of the Quaternary, he shared their position.

Cita answered to the various questions and comments that she was persuaded by ICS officers – who want fast and clear results obtained by formal votes and dislike proposals presented and published by individual scientists – to cast a vote on the Gelasian GSSP as soon as possible. The decision to vote was taken at a meeting of the SNS Bureau held in Vienna on April 26, 1995.

SNS chairman had a very hard time with the INQUA Commission on Stratigraphy – which acts as Subcommission for the Quaternary of ICS – in 1994 and 1995. She was accused in public of abuse of authority and of conflict of interests by ICS, and of lobbying with ICS by INQUA officers. The accuse was related to a workshop in Bari (September / October, 1994) dealing with the Pliocene / Pleistocene boundary, which was widely reported.

In the near future the following steps will be performed:
a) Answer to the no-votes and distribute the correspondence to old SNS members;
b) Extend vote to the corresponding members (as suggested by new ICS Guidelines)
c) Prepare a report for voting by ICS.
All this activity is planned before the end of this year (dec. 1995).

3. Results of elections of new SNS Bureau (1996-2000) postal ballot

Results of the postal ballot for the election of new SNS officers (1996-2000) were presented by **Cita** and **Halmai**. The nominations were presented and discussed at the Bureau meeting held in Vienna.

Chairman:	**D. Rio**	21 yes	1 no	1 abstain
Vice-Chairman:	**F. Rogl**	21 yes	1 no	
	R. Tsuchi	20 yes	1 no	
	W.J. Zachariasse	20 yes	3 no	one vote as chair

First vice-chairman and secretary will be decided later.

The new Bureau will take over from the present one text year, after the 30th International Geological Congress in Peking.

Cita briefly presented the new Bureau members:

Rio (Italy, SNS voting member) is professor of Micropaelontology in Padova, a well known specialist in Cenozoic calcareous nannofossils, with a wide international experience in integrated biostratigraphy;

Rögl (Austria, secretary of Paleogene / Neogene Working Group) is a scientist at the Museum of Natural History in Vienna, and has a large experience in the Paratethys;

Tsuchi (Japan, SNS voting member, ch rman of RCPNS) is professor at the University of Shitzuoka and is very active in the far east;

Zachariasse (Holland, SNS voting member) is at the University of Utrecht, one of the best specialists in Neogene micropalcontology.

The entire present Bureau steps down in one year from now, and a real re-organization of the Subcommission is expected. The wide international composition of the new Bureau, hopefully followed by a similar change in memebership and by a reduction of the ex- officio members, should result in a more dynamic attitude.

4. Subcommission membership

The Subcommission has 30 voting and 22 corresponding members. Nine voting members representing the four regional committees are ex-officio. They are considered too-many, and unevenly distributed, since some regional committees have just one ex-officio member, others have four.

According to the new statute of ICS, a member cannot stay longer than 8 years (two IGC intercongress terms), and 1/3 of membership has to rotate each year. The latter condition is considered difficult to meet, if we want to have some consistency in behavior, but the former is well accepted.

After a long discussion and considering that **Hornibrook** and **Jenkins** died, that **Barron** requested to step down, that **Kovak** has moved from ex-officio for RCMCS to corresponding member, that **Magné** is retired and inactive since long time, that **Padron** has been removed as ex-officio, the following new voting members, on the basis of nominations already discussed in April and of new ones, were proposed and accepted:

Jan Bachmann, Sweden, University of Stockholm, nannofossil specialist;

Alan Beu (New Zealand), invertebrate paleontologist;

Alessandro Montanari (Italy), event stratigrapher;

Johan Meulenkamp (Holland), previous chairman of RCMNS;

John van Couvering (USA), Director, Micropaleontology Press;

Fred Rögl (Austria), micropaleontologist and stratigrapher.

5. Results of Miocene/Pliocene Boundary Workshop

The results of the Miocene/Pliocene Workshop held the same morning are briefly presented by **M.B. Cita** (see also report at pages 26–30).

The candidate sections are now reduced to two, since the Carmona section is considered inadequate and does not meet the requirements for the definition of a GSSP.

The Sicily section (either Capo Rossello, as originally proposed by **Cita** in Montreal in 1972) or Eraclea Minoa (see **Hilgen** and **Languereis**, 1991) are extremely well dated by means of multiple biostratigraphies, magnetostratigraphy and astro–cyclostratigraphy. The position of the boundary at the base of the Zanclean (Messinian/Zanclean boundary) is now dated at 5. 3 Ma and lies 5 astronomical cycles beneath the base of the Thvera Subchron. It is world–wide correlatable. The weak point of this boundary is that the underlying late Messinian strata ("arenazzolo" unit, "lago–mare" biofacies deposits) are not fully marine. Moreover, there is a contention by **Suc** and co–workers that a gap (of unknown extent) exists at the base of the Trubi Formation.

The composite section near Rabat (Morocco) facing the Atlantic, thoroughly investigated by **Benson** and co–workers, has the advantage of displaying a continuous marine record across the boundary. The proposed GSSP is not coincident with the GSSP proposed in Sicily, but lies at the Gilbert/Epoch 5 magnetic reversal.

In other words, it falls within the late Messinian, during the "salinity crisis". This position of the boundary is considered to be erroneous from a geological point of view by SNS chair, since the termination of the salinity crisis and the re–establishement of open marine conditions in the Mediterranean (=Pliocene transgression) are considered an event of paramount importance worldwide, even though not entirelly unravelled so far in the open ocean.

In the following discussion it appears that the first alternative is preferred by italian and dutch scientists actively working in the area, and is also preferred in the far east (as testified by RCPNS chairman), whereas the second is preferred by **Benson** and co–workers. **Suc** and co–workers are in favor of a GSSP defined in the Bou Regreg section, but in the same position as the now used boundary stratotype in Sicily.

The decision is taken to postpone a postal ballot on the subject, waiting for the results of investigations in progress:

a) on the precise age of the Pliocene transgression in new ODP Sites 969, 974, 975 and 978 (by **Iaccarino, Cita** and co–workers). If the base of the Pliocene proves to be isochronous along the E– W transect some 4000 km long, this is considered to be a strong argument in favor of the location of the base of the Zanclean.

b) on the number of astronomical cycles of the Messinian, that are now being identified, dated and correlated in the pre– evaporitic Messinian, but not yet in the evaporites, in order to prove or disprove the existence of a significant gap predating the Pliocene transgression on land–based records (by **Hilgen** and paleomagneticians).

c) on the possible identification of some biostratigraphic events in the so–called "quiet zone" of **Benson** et al.

6. Plans of the activity for the definition of various Neogene GSSPs (short term)

The plans of activity for the definition of various Neogene stages GSSP, an urgent task required by ICS to SNS, are as follows:

1) Finalize approval of Gelasian GSSP by sending out written answers to the various negative responses, by extending (informal) vote to corresponding members, by preparing a report to ICS (see article at page 22).

2) Launch a postal ballot to SNS members (new list) for the Piacenzian GSSP, located in the Capo Rossello composite (Punta di Maiata) at a level corresponding to the extinction event of *Globorotalia puncticulata* (zone M P1 4a/M P1 4b boundary), just above the extinction level of Sphenoliths, at the Gauss/Gilbert magnetic reversal, at the base of the astronomical cycle 78, approximately at 3.5 Ma. Postal ballot to be distributed along with the Neogene Newsletter n. 2, or later this year.

3) Possibly in 1996 or later (1997 ?) organize a Workshop on Messinian GSSP whose position, with the new radiometric dates obtained at M. Casino, in Gavdos (Greece), and in northern Morocco, seems well defined at around 7 My and well correlatable biostratigraphically and cyclostratigraphically.

Two or more candidate sections are expected to be presented and discussed, located in Gavdos, Sicily, northern Italy, and in Morocco. The Moroccan section of Bou Regreg could eventually be proposed as a type section for the time interval corresponding to the Messinian.

The same workshop could eventually lead to the definition of the Miocene/Pliocene GSSP, always within the framework of conventional stages. SNS keeps a clear position in this respect, with GSSP for major subdivisions being located at the base of existing (or newly proposed) stages.

4) Define a GSSP for the Tortonian. According to **Hilgen**, the investigations on astronomical cycles recorded in that interval in sections calibrated both biostratigraphically and paleomagnetically are so advanced and promising, that a definition could be presented soon (in a couple of years presumably).

7. Neogene Symposium 1996 (IGC Congress, Peking, China)

The Neogene Symposium announced in Neogene Newsletter n. 1 has been formally approved by ICS and by the organizing Committee of the 30th International Geological Congress to be held in Peking, China, in August 1996. Co-conveners of the Symposium 1-9 *Interaction of global trends and regional events in the Neogene stratigraphic record* are **M.B. Cita** and **Pinxiang Wang**, SNS voting member. The Symposium is co-sponsored by the European Consortium for Ocean Drilling (ECOD).

Invited contributions will be given by **Jim Kennett, John Barron, Yuri Gladenkov, Jan Bachmann and/or Isabella Raffi, Jack Baldanf, Nick Shackleton, Kai Emeis**. Contributions pertinent to the theme will be appreciated by **Fritz Hilgen, Dick Benson, Ruichi Tsuchi**. Deadline for abstracts is Nov. 1, 1995; deadline for registration is Febr. 1, 1996.

8. Any other business

No other business were presented. Next SNS business meeting will be held during the 30º IGC in Peking in August, 1996.