Finally, the Marine Division is a reality. The proposal has been ratified by the SAICE Council.

The long uphill is over: now you can join the division. Simply copy and complete the form at the end of this newsletter and return to: membership@saice.org.za

In the process of establishing this new division we have had to work with the Railways and Harbours division and I would like to formally thank them for their whole-hearted support. Without that, we could never have done it.

We need too, to thank Johan de Koker for all his assistance along the way.

The Railways and Harbour Division or, more fully, the Railways, Harbours and Pipeline Division will remain just that. Those engineers, particularly Transnet engineers, who get involved in back of quay work, road, rail, services property etc., or those who feel happier staying with the R&H division will always be welcome in that division. They will, of course be very welcome in both divisions.
The new Marine division serves those who like to “get their feet wet”! By this, I mean working on the coast and working with the sea in all its moods.

More explicitly, this new division will serve as a voice for Civil Engineers in Marine and Coastal matters.

The sea shore is one of our greatest assets both aesthetically and commercially but these are qualities that are easily destroyed. Two things stand out:

- *The shortness of the SA coast*
- *The blind ignorance of the general public when it comes to coastal processes and coastal development*

If this is your field of interest, we need you to join our Marine Division.

A copy of the form either to join the Marine Division or to transfer to it is appended to the end of this newsletter.

Please copy the form, complete and return to membership@saice.org.za
Water, specifically seawater is universal and characteristic of Marine engineering. Works not immediately adjacent to the sea are in the water where they are exposed to wave action, often of enormous force and intense corrosion. These are conditions that are alien to other fields of engineering.

The following is a brief checklist of the topics involved:

Wave fields, protected water and harbour layout
Breakwaters, groins, revetments, sea walls and wave interaction
Dredging and Channels
Quays, jetties and ship interaction
Dry docking systems
Corrosion
Seawater intakes and marine outfalls
Beach dynamics and dune field stability

Currently there are no engineering and engineer-based management services to state owned small harbours, to the coast in general and, with the exception of Durban, there is no engineering competence in the towns and cities on the coast.

Given the growing urban development of the coast (a worldwide phenomenon), a lack of marine engineering competence on the part of the public authorities will be catastrophic.

A competent Marine Division can act as an effective vehicle for SAICE to engage with the public sector with respect to our activities, support the marine profession and to upgrade standards and competitiveness of the profession internationally.
It is anticipated that initially membership will stabilise at around 200. Once established and well run, that figure could easily double. If there is sufficient interest from Durban, the division can be split into Cape Town and Durban branches.

For comparison, SAIMENA, the South African Institute of Marine Engineers and Naval Architects (the “marine” is mechanical engineering), has about 400 members split between Cape Town and Durban branches with subs of R 100 per annum for members. Although small and completely independent, it is very active in its field and has proved very viable.

Once the proposed division has been established with members registered with SAICE and SAICE are able to pay the allowance, a SAICE mandated bank account will be established as per SAICE requirements. There will be opportunities to raise extra funds for the division from various activities eg donations, profit from conferences, sale of work group guidelines etc.

The new division, as part of SAICE is a Learned Society and its activities will be limited to this function involving:

- Professional, Technical and Academic matters in the Marine field
- Work groups to provide written guidelines to cover local eg municipal, coastal, boating issues etc.
- The hosting of conferences, both national and international: Cape Town has one of the best conference bureaux in the world and they literally take over and advise on
conference organisers and funding. They make it very easy for a small division to implement national conferences or apply to host standing international conferences.

South Africa has done well in setting up environmental legislation governing the coast but outside of TNPA and Durban municipality, there is almost no institutional competence in coastal and small harbour engineering. In fact, a strong environmental capacity without a balancing engineering capacity can actually make things worse. Attending to this under the SAICE umbrella must be a major concern of the proposed division from the outset.

Close cooperation with PIANC SA will be a *sine qua non* for the proposed division. Envisioned is a reciprocal liaison between the two committees. Bidding for the four-yearly PIANC international conference will be one of the first objectives.

The proposed division will work actively to promote a public understanding of the sea and the seashore and the engineering role.

So far proposals for a marine equivalent of the SAICE Bridge Building or Water competitions has only yielded a suggestion for a sand castle competition! However, this idea could be expanded to an annual SAICE Marine Beach Carnival. Ideas of this nature can be pursued.
Mr President, Councillors, Ladies & Gentlemen

Thank you for this opportunity to address Council.

I’m here representing the Coastal & Harbour Engineers of South Africa to propose the formation of a MARINE DIVISION for SAICE.

Our proposal is, briefly, for:

• *A new, autonomous division of SAICE.*

*This division shall serve Port, Harbour, Coastal and Ocean Engineering*

• *This division shall be called the Marine Division.*

(This would parallel legal usage for seashore activity as opposed to “Maritime” that is associated with going deepwater.)

We believe that this will address COASTAL issues that are of critical importance to the country

I’m just an ordinary engineer, not a trained speaker but I have to convey to you these grave matters and convince you to support our petition.

To compensate, let me ask you to imagine you are hearing some great orator of the past in a similar situation.

Let us think of Themistocles when he addressed the agora and convinced the Athenians to build a great battle fleet (and docks and slipways – but historians do not mention those) – the fleet that destroyed the Persians at Salamis and saved Greece.

It was not only Greece he saved but also the origins of democracy and of science that together are the mainstays of civilization today.

Marine engineering, briefly, consists of:

• Wave fields, protected water and harbour layout
• Breakwaters, groins, revetments, sea walls and wave interaction
• Dredging and Channels
• Quays, jetties and ship interaction
• Dry docking systems
• Corrosion
• Seawater intakes and marine outfalls
• Beach dynamics and dune field stability
These diverse fields draw on the same body of theory and practice. They are mutually compatible, forming a coherent and unique field characterised by seawater and waves.

It is in this respect that the field needs a division of its own.

The coastlines of the world, today are under enormous development pressure – industrial and residential. This is particularly true in South Africa. While we have a 3550 km coastline we still have one of the shortest coastlines in the world relative to surface area of the country.

Currently there is little or no engineering and engineer-based management services or competence to:

- The state owned small harbours
- the coast in general
- the towns and cities on the coast (except Durban).

There is a strong consulting engineering and contracting sector in the marine field with the back-up of the CSIR laboratories in Stellenbosch. By their nature these respond to demand from the public authorities.

Without strong marine engineering competence from the employers, the private sector cannot optimise their contribution, co-ordinate activities or develop regional standards. Nor can they rely on a rational business model.

This lack of marine engineering competence on the part of the public authorities is leading to a catastrophic situation.

South Africa has strong environmental legislation governing the coast but outside of TNPA and Durban municipality, there is almost no institutional competence in coastal and harbour engineering. In fact, a strong environmental capacity without a balancing engineering capacity can actually make things worse.

There is a real need in the country for a Marine division that will provide SAICE with a vehicle to address these issues.

Currently the only division representing the marine sector is the Railways and Harbours Division. It would appear that this division had its origins in the early days of SAICE. It was a group serving the special needs of engineers of the old SAR&H.

Since those days, the SAR&H has been transformed into Transnet with its various functions separated into autonomous groups. In particular, the railways and the ports are now each separate business entities. A common pool of railway and harbour engineers no longer exists.

The engineers of the Transnet National Ports Authority are now only a small proportion of the engineers in the field. Most are employed as consulting engineers and contractors.
Although the R&H division does try to honour the “harbours” component, reality intercedes. There is effectively no voice for these engineers.

This present initiative started with the idea of forming two branches, railways in Gauteng and harbours in Cape Town. It soon became apparent that this was not viable.

For a single field the administration would be complicated but workable. When the technical components are totally different, it becomes unworkable.

Hence the decision to go for an autonomous division.

The committee of the R&H division was polled. Five of the fifteen members replied to Steven Kaplan – a one-third quorum. All accepted the split. The respondents were:

• Chair
• Vice Chair
• Immediate past Chair
• Treasurer
• Committee Member

The issue of a new autonomous division was discussed at the Executive Board meeting on the 24th March. The response as reported by Steven Kaplan was not in favour of a new division.

However, these responses still reflected the earlier thinking in terms of a split division. The situation is perhaps best illustrated by pointing out that marine has more in common with either structures or water than with rail. The association of marine with rail is simply an outdated historical anomaly.

On the matter of division activity – a business plan – the field is rich in opportunity including:

• The normal division business, meetings, interesting speakers and site visits
• Conferences, both national and international – Cape Town has a world-class conference bureau to promote these.
• Work groups to produce written guidelines to cover local eg municipal and provincial coastal and boating issues.
• Working through SAICE, acting as a vehicle for SAICE, a Marine division can play an active role, within the functions of a Learned Society, in promoting both the proper management and use of the coast and support for the private sector engineers in the field.

The single issue that must receive priority in the beginning is membership. The community is small and we must recruit actively amongst SAICE members.

Initially we expect to be able to sign up about 200 members although this may take a while to achieve. Subsequently, with time, we may grow to double that.
My overriding impression in promoting this initiative has been the enthusiasm of the community of coastal and harbour engineers; in particular, the enthusiasm of the members of the steering committee.

The seashore is one of the most exciting, beautiful, interesting and dynamic places on earth. There is even growing suspicion that the final stages of the evolution to fully modern humans took place on the seashores around the Cape.

I fully anticipate that a Marine Division, although small will be the most active, dynamic and productive of the SAICE divisions.
SAICE DIVISIONS

- Each member may select any number of technical divisions of which one division is “free”.
- Change of divisions may only occur once a year in October.
- Geotechnical division members are paying for ISSMGE membership, which means that when members select GEOTECHNICAL as their only division, they will still have to pay the additional surcharge.
- Student members may not elect to join a division.

Why join a Division?

- Opportunity for networking among discipline specific individuals and groups.
- Opportunity to participate in development of guidelines, codes and standards.
- Opportunity to participate in discipline specific Continued Professional Development initiatives.
- Opportunity to receive newsletters, exchange skills, access mentors and to be recognized by peers.

Please indicate your choice

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