

Dear IFHE Members

We extend to you our best wishes for this holiday season and for a happy and healthy 2018.
We look forward to continued collaboration in new activities during the coming year.

Kind friendly regards
Gunnar Baekken





FRIENDLY MEETING IN RIO: From left to right: Gunnar Baekken NOR, Andy Wavel UK , Harry Waugh Scotland, Douwe Kiestra NL , Bresieyda Marquez MEX.

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IFHE

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Abingdon House, Cumberland Business
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International Federation of Hospital Engineering

Minutes of Council Meeting No 50, Monday 29 August 2017, Rio Othon Hotel, Rio de Janeiro Brazil

1 Welcome

In welcoming all to the Meeting the President thanked our hosts ABDEH and in particular Fabio Bitencourt and his Conference organising committee.

Before asking all attendees to introduce themselves he asked all present to stand and remember two colleagues and great friends of IFHE who had sadly passed away during the last year; Ole Rist Past President from Norway and Enrico Milone also a Past President and Founder Member of IFHE

2 Attendance

There were a total of 33 people attending the meeting from 20 countries. Detail as follows:

A001 IHEEM UK:	Harry Waugh, Andy Wavell
A006 NVTG The Netherlands:	Piet Visser, Perry van de Graaf, Douwe Kiestra
A009 IHEA Australia:	Darren Green, Darryl Pitcher
A010 SAFHE South Africa:	Steve Drinkrow
A012 ZORG.tech Belgium:	Roger Albertijn, Paul Merlevede
A013 AEIH Spain:	Luis Gonzalez Sterling
A014 IHS Switzerland:	Peter Jäger
A015 FSTA Denmark:	Mogens Thrane
A017 WGKT Germany:	Matthias Schwabe, Christian Bender
A018 CHES Canada:	Steve Rees
A020 HEAJ Japan:	Yoshihisa Hirayama
A025 AADAIH Argentina:	Liliana Font, Luciano Monza, observer Jose Turniansky
A028 FSTL Norway:	Gunnar Baekken
A032 SUAIH Uruguay:	Pedro Elzaurdia
A035 ABDEH Brazil:	Fabio Bitencourt, Marcio Oliveira, observer Emerson Da Silva
A044 SIAIS Italy:	Daniela Pedrini and observer Simona Agger
A047 AARQHOS Chile:	Heriberto Hildebrandt



A049 HCI USA: Michael Wood, Walt Vernon
A050 SMAES Mexico: Briseyda Marquez, Francisco Allende
Also welcomed as a B Member was:

APAIH Paraguay: Maria Castillo

Exco Members included in the above

Douwe Kiestra	President (NVTG)
Darryl Pitcher	First Vice President, (IHEA)
Daniela Pedrini	Second Vice President, (SIAIS)
Liliana Font	Immediate Past President, (AADAIH)
Steve Drinkrow	Hon. Treasurer, (SAFHE)
Gunnar Baekken	Joint General Secretary, (FSTL)
Andy Wavell	Joint General Secretary, (IHEEM)
Steve Rees	Member, (CHES)
Christian Bender	Member, (WGKT)
Fabio Bitencourt	Member, (ABDEH)
Yoshihisa Hirayama	Member, (HEAJ)
Walt Vernon	Member, (HCI)

3 Apologies

Apologies were received from:

Francisco Castella (AEIH and E Member)

Brett Petheridge (IHEA)

Marcello Fiorenza (SIAIS)

4 Minutes of the Last Meeting

The minutes of the meeting held in Den Haag were accepted as an accurate record of proceedings

5. Matters Arising from the Minutes



There were no matters arising

6 Presidents Report

In giving his report the President referred to his letter showing the work he had done over the last year with particular reference to:

- 4 video conference calls with Exco plus a number of calls with the Secretaries.
- The many visits he had made to Conferences both in Europe and South America
- Meeting companies who may be interested in providing sponsorship for IFHE
- Meeting a Chinese delegation, hosted by CB in Holland during September 2107
- Provision of a policy document for the use of the IFHE logo
- Renewed contact with Portugal
- Updates on the seven objectives set for the year which were
 - Improving contacts internally and externally
President has made many visits and Exco are meeting more regularly
 - Encouraging Working Groups to produce quality outputs
Working Groups are not running well and we have to think how we can make people more responsible for these in order to be able to publish the results of their work
 - Expanding Membership of IFHE
I am pleased to welcome Paraguay as a B Member and will do all can to help them towards full A Member status
 - Enhancing the tools available to IFHE to serve its members
The Digest is running well and newsletters are being produced. The Library needs more help from the members to become a more useful tool.
 - Environmental Sustainability
This is on going

A copy of the Presidents letter is appended to these minutes.

7 Administration and Secretariat

The General Secretary confirmed the continuing excellent working relationship with

IHEEM in providing administrative support. Both Gunnar Baekken and the President went on to refer to;

- Value added to the organisation by its volunteers
- The continued good works around the provision of the Digest and International pages in Health Estates Journal
- The work undertaken in Exco during its regular video conference calls



- Problems experienced by the Secretariat in gaining responses to request for information
- The positive response from organisations in providing reports using the new report proforma

8 Finance

The Hon. Treasurer, Steve Drinkrow presented his financial report for the 2016 and budgets for 2017 and 2018.

- **2016:** The year-end position showed a net income of £6,680.00 which was helped by an income of £7,162.00 from the Congress and IFHE Digest but as expenses for the period were higher than budgeted a budget surplus for the year of £4207.00 was recorded.
- Steve Drinkrow thanked Annabelle Morgan of IHEEM for her stewardship of IFHE's accounts and Perry van de Graaf and Piet Visser for their continued role in examining the accounts. He confirmed that following Independent Examination of the accounts he had written confirmation of approval of the year end position.
- Perry van de Graaf and Piet Visser have agreed to continue in their role as Independent Examiners of IFHE accounts.
- **2017:** The budget is likely to show a deficit of -£1,500.00 which is due to:
 - No congress levy
 - Contract with IHEEM rising with inflation
 - Travel costs associated with holding Exco and Council meetings in Brazil
 - Failure of 9 member organisations and B & C members to pay their annual fees.
- Steve Drinkrow noted this position could change as it was decided to move some of the President's European Initiative, now renamed as President's Initiative into the 2018 budget.
- **2018:** The budget has been raised in line with UK inflation (2.7%) which helps gradually raise income rather than leave any rise for a number of years and then ask for a larger rise.
- Noted travel costs will be higher as the Congress is in Australia

Steve Drinkrow commented that a sum of approximately £140,000 is held in order to provide 4 years working capital necessary in the event that income does not come from Congresses.

Roger Albertijn raised a question about sponsorship as a way to help fund work undertaken by IFHE. The President briefly explained the work he is doing to attract sponsorship saying this would be possible but prospective sponsors liked to be linked to a project. An ideal one for us is education and DK referred to a Masters qualification currently being run in Europe as being suitable for sponsorship. He further mentioned that the Presidents fund monies transferred to the 2018 budget may be used for this on a global basis.

Marcio Oliveira noted a similar multinational initiative being run in South America.



In the absence of further questions Steve Drinkrow was thanked for the presentation of accounts.

9 Future Congress Reports

2018, Brisbane, Australia: Darryl Pitcher confirmed the venue was booked and he looked forward to seeing as many IFHE Member organisations as possible at the Congress to be held between 6-11 October. He confirmed the Congress website is now open at www.IFHE2018.com and that following this meeting the call for papers would start.

IHEA had also been able to arrange for the International Health Federation (IHF) to have their World Congress at the same venue from 10-12 October. Darryl explained the advantage to IFHE is that IHF attracts senior executives from Healthcare and that they had agreed to promote our event. As a reciprocal arrangement Darryl circulated flyers for their event and reported that member fees would apply to both events. He encouraged those present to consider attending the IHF event. Darry suggested that a greater liaison with IHF could only be good for IFHE and Paul Merlevede agreed that this is a good way forward. There is a need to promote IFHE to a higher level.

2020, Rome: Simona Agger on behalf of Daniela Pedrini, explained that for personal reasons the current 2nd Vice President, Marcello Fiorenza has stood down and the role has transferred to Daniela Pedrini. She continued, reminding the meeting of the original proposal to hold the Congress in Rieti, that as IFHE was formed in 1970 in Rome it made sense to hold the Congress there, particularly as it would be the 50th anniversary of the organisation. Venues were currently being explored with a number currently shortlisted;

- Parco della Musica - a music centre
- Marriott Hotel
- A Rome Lifestyle Hotel.

Dates for the Congress are confirmed as 23 - 28 May 2020 and some suggestions for technical visits have been made.

Costs for the event are likely to be in the order of:

- Full fee paying delegate €600+VAT
- IFHE Delegate €400+VAT
- Accompanying Person €400+VAT

The President agreed the change of venue was a positive one particularly as this will be the 50th anniversary of IFHE. With this in mind information on the last 50 years needs to be collated so that a publication can be created for those attending. A working Group will be formed to help this process.

Steve Drinkrow felt the projected costs were high noting the proposal was some 50% more than the costs for Australia.



The President said the Congress in the Netherlands had found a way of using monies from the Exhibition to offset delegate costs and agreed to send a copy of the final account to SIAIS.

Both Darryl Pitcher and Simona Agger were thanked for their updates. Roger Albertijn asked if the International Building Award was to be offered at future Congresses. Both Australia and Italy confirmed they will be taking this matter forward.

Louis Gonzales Sterling commented on the lack of representation from Africa and Asia to which Darryl Pitcher responded saying he is working to ensure a better attendance. Steve Drinkrow confirmed SAFHE would be attending the Congress. Luciano Monza reminded the meeting that the interim meeting in 2009 held in Buenos Aires had not been well attended but that the Congress in 2014 had, confirming that main Congresses attracted a better attendance.

10 Membership

- Prospective New Members
Paraguay had submitted an application to become a full member of IFHE. The application had been circulated to all and following discussions at the Exco meeting a recommendation for admission as a B Member was suggested to Council. The President explained that, in Exco's view, the organisation did not fully meet the criteria as laid down in Standing Order S.O.3.1 for A member status in that the membership, although below the threshold of 50, did not have the balance of Architects, Engineers, Technologists, and Technicians etc., necessary. The President suggested to Council that Paraguay be admitted as a B Member. This was agreed and Paraguay were welcomed to IFHE. Every encouragement would be offered to Paraguay to progress to full membership.
The President thanked Liliana Font for her assistance in progressing this application. Medicare Systems from the UK was approved as an Associate Member
Paul Merlevede indicated Slovakia and Czechoslovakia are being looked at as prospective members of IFHE EU and that they were likely to be invited to an IFHE EU meeting to see what the organisation is all about before committing. Luciana Monza agreed this was a good approach.
- Members in Arrears
Steve Drinkrow confirmed the following members remain in arrears for one or more years:
 - China
 - Costa Rica
 - Cuba
 - India
 - Indonesia
 - Kenya
 - Malaysia
 - Spain
 - Uganda

Of the above both Cuba and Spain confirmed payment of these fees would be organised immediately following the conference.



11 Venue for 2019 and 2021 Council and Executive Meetings

It was confirmed that IFHE EU will be holding the Conference in Manchester during the IHEEM conference to be held 8-9 October 2019. Following a decision made in Den Haag in 2016 when it was agreed the interim for IFHE Exco and Council meetings would be in Europe it was agreed that the full Exco meetings will join the IHEEM Conference also. Andy Wavell gave a brief outline of the venue and contents of the Conference confirming further information would be available during the 2018 Congress in Brisbane.

The President indicated the 2021 meetings will be held in Mexico and asked Briseyda Marquez to give a brief presentation which showed the possible location for the meeting together with other views of Mexico City. The meeting will take place during November

IFHE EU confirmed the 2021 meeting will be held in Spain and is likely to take place in October.

12 A Member and Regional Reports (Already tabled)

The majority of those attending the meeting had completed and returned their Organisations report using the template provided. The President commended those who had done this saying it made the activities easy to read. He asked that **ALL** organisations make every effort to complete a return whether attending or not. There was a general consensus that the report form is a useful way forward.

ACTION IFHE Membership

Organisations gave a brief update to enhance comments made in their report with;

- Chile giving a verbal report that they have now 55 members and had produced a year book (given to attendees), were at their 5th anniversary and are actively chasing new members.
- CHES confirmed one new Chapter added during the year, Saskatchewan, and that overall national membership was +1000.
- Belgium advised of a change of name to reflect what their organisation actual does within the healthcare environment. They will now be known as zorg.tech Belgium.

ACTION Secretariat

Roger Albertijn confirmed their conference had 750 delegates, they are working with the government on Legionella and that they use Wikipedia as a database.

- WGKT comments on the lack of their report in the information pack despite it being sent. Andy Wavell confirmed receipt of the report and would ensure it is posted in the Google drive pack for all to see post meeting.

ACTION Andy Wavell

- Brazil confirmed that despite having problems within their organisation they had 700 active members and had held 180 meetings during the last year and currently had 19 branches.
- The President raised his concern that there had been no Regional Reports and asked this be done in future.

ACTION All Regional Groups

13 Publications

- IFHE Digest
Andy Wavell confirmed that 19 articles had been published in the 2107 edition of the Digest with contributions received from Austria, Brazil, Canada, Colombia, Finland, Japan, Malaysia, Spain/Portugal, UK and USA. He thanked the editorial committee for their work in both arranging supply of articles and rating them to ensure acceptability for the publication. Work on the 2018 edition has commence with 33 synopses being received and expressed the hope that they will all turn into firm articles.



- Health Estate Journal (HEJ)
Four International editions of the HEJ were circulated to the member organisations of HEJ during the year. Despite asking for more information the only articles received are those from Canada and Australia with whom the HEJ has a reciprocal arrangement. It is appreciated that getting articles translated is not easy but once a year would be useful. Further the HEJ carries International News and this is currently limited to what the President has done, what Exco are doing and information on future Congresses/Conferences. It would be useful to have more from the regions.
- IFHE Logo
The President introduced this item saying that IFHE needed to update its image by having an updated logo and a template for all communications. Briseyda Marquez of SMAES had produced a document showing the suggested forms of the logo and together with the President a policy document. A brief presentation was given and the meeting was pleased to accept this. It was agreed the document would be hosted by the Secretariat and made available for all to use. The General Secretary commented that a change had been suggested some ten - fifteen years ago but it was decided to keep the status quo and felt it was time to change. Discussion took place on the change from Hospital to Healthcare in IFHE title. All agreed this change represents what all member organisations are involved with and should be adopted. It was agreed the change would be raised at the next Congress to seek confirmation that all were content. **ACTION President/General Secretary/Secretariat.**

The new logo will be subject to copyright that will attract a cost to IFHE.

Action Hon Treasurer

14 Group Sessions

In order to obtain more involvement of those present a number of questions were posed and the Council divided into five groups to discuss these and report back to the meeting on their thoughts.

The questions were:

- a) What do national associations and individuals want from IFHE Congresses, Newsletters, Website, Working Groups, Education, Publications and Library?
- b) What could I do as an individual to contribute to Hospital Engineering/Architecture/Facilities Management around the world

Feed back to the questions was interesting and will hopefully steer the organisation to help its Member bodies.

Question1

- IFHE is not known by members of national organisations.
- Ability to access Authorities and Government Officials, by using the weight of IFHE as an International Organisation, to influence policies.
- More Countries should have the ability to influence topics and themes and Congresses and Conferences.
- Provide a platform for technical staff certification, status and recognition.
- Although the language of the Federation is English there is a need to provide translation so that greater understanding of articles etc. available.



- Greater access to technical papers.
- Broaden educational, training and access opportunities for developing countries.
- There is a need to collect best practice and share this amongst the membership.

Question 2

- Share and communicate locally
- Build on lessons learned (Good and Bad)
- Support and attend learning opportunities
- Deliver presentations.
- Become a gateway for others to connect to IFHE.
- Share knowledge gained from disasters and mistakes.

The President asked if Council felt this exercise was worth repeating at future meetings. There was unanimous agreement for this.

SR reminded the meeting of the dream of Past President Ole Rist who wished to change the way IFHE works and make it more interactive.

RA suggested it should be possible to take some of the ideas forward e.g., to involve younger people and in particular getting them to Congress.

15 IFHE Strategic Plan

Information to follow

16 IFHE 50th Anniversary

See Section 9 Future Congress Reports

17 Working Group Reports

The President raised his concerns that the commitment to WG's in that offers are to help are made but this does not materialise. MO wondered whether the WG's have the right membership and this should be reviewed.

There are currently ten WG's as noted below together with the lead person:

- | | |
|--|------------------|
| • Working Group 1, Environmental Policy & Sustainability | Darryl Pitcher |
| • Working Group 2, Education | Steve Rees |
| • Working Group 3, Publications | Vacant |
| • Working Group 4, Safe Hospitals, WHO | Paul Merlevede |
| • Working Group 5, Standards and Regulations | Christian Bender |
| • Working Group 6, Social Media | Gunnar Baekken |
| • Working Group 7, Statutes & Standing Orders | Andy Wavell |
| • Working Group 8, Public Relations | Douwe Kiestra |
| • Working Group 9, History | Steve Drinkrow |
| • Working Group 10, Future of IFHE | Walt Vernon |

It was suggested there is a problem in actually organising meetings as the means of holding a meeting with up to six



attendees needs to be held on platforms such as **gotomeeting**. It was suggested that IFHE investigate the use of a professional meeting programme for all to use.

ACTION Gunnar Baekken

WG 4 Safe Hospitals, WHO

PM confirmed it was difficult to facilitate the WG and that there were currently three active members. In order to make the group more effective still more members were needed and he was pleased to report the Claudio Meirovich from Spain has agreed to join the Group.

PM confirmed he had taken part in Safe Hospital Index training which he had found informative. WHO asked for attendance at a similar event in Africa and despite an applicant but it failed to arrive before the deadline.

PM confirmed he and WV had attended a Global Forum in Geneva where WV had presented a paper "Implications of medical equipment for building design". Our focal point, Adriana Berumen was pleased with IFHE's involvement.

PM has suggested IFHE can help a WHO forum to take place in Dublin during November 2017 but confirmation is still awaited for this.

WHO are asking for as much information about new developments in Healthcare with the idea of preparing a publication for use by those in developing countries. **Access to the IFHE Digest would help here**

For the future PM suggested there needed to be better collaboration between IFHE and WHO to create a body of information and people who would be prepared to assist with WHO requests for help.

WHO will include information on IFHE in one of their publications and it was agreed that the Standing Orders and Information page be sent **ACTION Andy Wavell/Paul Merlevede**

WG 7 Standing Orders

AJW confirmed all the changes had been made and papers circulated to all member countries. The only area of concern was the fee base and after some discussion it was agreed that fees would be as follows and that they would rise by inflation.

Individual Full Time Delegate	£15.00
Part Time Delegate	£10.00
Exhibition Stand	£20.00

18 Any Other Business

18.1 RA informed the meeting of an IFHE EU initiative where abstracts of studies were

sought with the best paper being given €5000.00. Of the eight papers received two will be financed, one from Belgium and one from Italy.

18.2 SD noted that there had been no regional reports submitted at this meeting and asked

that these be forthcoming at the Congress in 2018 PM confirmed there will be a report from IFHE EU.

There being no other business the President drew the meeting to a close thanking all for taking part in a very positive meeting.

19 Date and Venue for Next Meeting

Sunday 7 October at 09.00 in Brisbane Conference and Exhibition Centre

MNAZI MMOJA CHILDRENS HOSPITAL.

Stone Town, Zanzibar, Tanzania.

Introduction.

Haukeland University Hospital (HUH) has been collaborating with Mnazi Mmoja Hospital (MMH) in Zanzibar, Tanzania in various medical fields since 2011. MMH is the largest hospital in Zanzibar with 500 beds, and operates directly under the Zanzibar Health Authorities. As a semi-autonomous part of the United Republic of Tanzania, Zanzibar organizes independent health services. MMH is a referral hospital providing services for the Zanzibar and Pemba population of 1,2 million. The hospital also educates different categories of health personnel.

The Department of International Collaboration (DIC) is responsible for coordinating the international collaboration at HUH and is collaborating with university hospitals in South Africa, Ethiopia, Malawi, Zanzibar and India. HUH has over the years had a continuous representation of nurses, medical doctors and other health personnel at MMH.

A Haukeland House has been built at the premises of College of Health Sciences to accommodate the personnel

With funds from a private donor in Bergen, The Royal Norwegian Embassy in Tanzania and the Ministry of Health in Zanzibar, a new Children's Clinic has been built at MMH. The process of construction of a new Mental Hospital with a separate building for addiction medicine has started and the building will be finished in 2 years. HUH has managed to get funds from a private donor to this project and has been active in the construction planning process. HUH also support training of local health personnel to the Children's clinic the new mental hospital.

The challenges of working in a different culture.*Behave yourself and take care.*

One of the very first challenges, that has very little to do with the building site, is to get to know the local rules of behavior. Compared to many other African cities, Stone Town is a rather safe place. But crime does occur and one should be careful and avoid certain areas, especially during night. Also, it is important to follow local established rules of behavior. Be a good guest and respect people as you expect visitors to obey our rules.

Push pull.

One of the major challenges of working in a foreign country is to get used to the local culture and to get acquainted with the different construction traditions and how things are done.

When you as a newcomer show up as a supervisor, chief engineer or whatever title you might have, it is vital to gain a certain level of trust. This is not obtained by overruling or questioning every way things are done, even though it might be very tempting.

In my experience people take pride in what they do, and are more than willing to share their ways of constructing buildings and systems. Most people are also curious about how things are done in other places. In most cases they are very much aware of different building techniques. Manual work is very common and safety on site is not up to western standards.

It is important to find solutions that will profit both the customer (??) and constructor, and at the same time not compromise on quality and schedule. Agreed quality versus delivered quality must be checked, and deviation must be handled while it still is within the hands for the constructor. Not very much different from most construction sites.

Family business.

In my experience quite a few businesses are family owned. There might be some pros and cons regarding that matter. One of the pros is that honor and reputation is often of vital concern. At the same time influence from family members are strong, and might “delay” progress. “This is the way we always did.” This might be because of strong family ties and respect for the older generation, something that is missing in many western cultures.

The project.



The Children's Clinic is a three story high building consisting of a dialysis unit and different bed wards for children, situated on both sides of a semi closed courtyard. The water tanks and the solar heating on rooftop are not seen from this perspective.

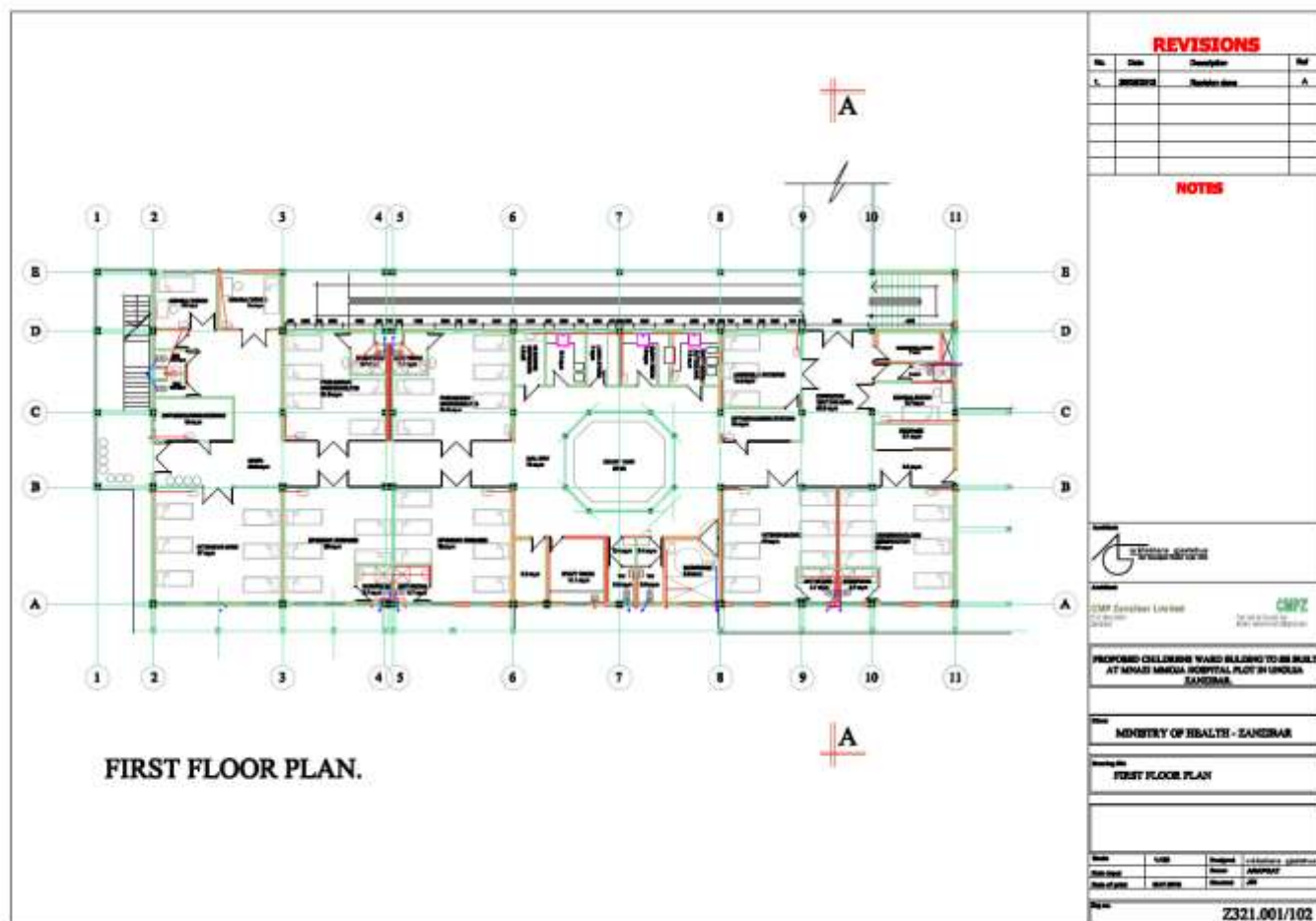
Some infrastructure such as oxygen plant, compressed medical air plant and power supply are to be shared. Also common entrance and guard house. The wooden doors and the wooden windows are all locally made by the local constructor Rans. Outdoor area and playground are common for both projects.

The drawing under shows the general plan for first floor.

Here one can see the wards situated on both sides of the courtyard.

Make notice of the multiple rooms. A situation one will not find in Scandinavia. However this is common here as it was 20 years ago in Norway.

Nice rooms, easy access to toilettes and showers. Proper air flow due to use of fans and cross ventilation. The finish of the floors and walls make it possible to do proper cleaning and other maintenance. Nice view and easy access to outdoor space, even in second floor from the veranda.





The project has made room for a nice outdoor area and playground for children.
Big trees give some shadow.



These guys were eager to show their nice crafts skills, craft that is too time consuming and far too expensive in

The challenges with technical systems and infrastructure

In a project like this most challenges are connected to different technical systems. One of the main problems is that systems that are obvious to us are likely not to even have been considered. This might be:

- Hot water in every tap. Not common, and might even be too costly.
- Bed pan washers and lots of equipment need water at a minimum pressure.
- Firefighting systems based on water needs certain pressure to work. And water reservoirs.
- Due to calcium, water must be treated to avoid clogging.
- Certain systems such as dialyses need stable water, suitable reservoirs must be in place. Water in reservoirs might get too hot for hemodialysis.
- Power, both surge arrestors for sensitive systems as well as adequate generators must be available.
- Nurse call
- Solar heating of water
- Proper natural ventilation
- Proper handling of sewage.
- Use of natural light, ventilation, use of grey water for watering.
- Patient- and staff safety, use of proper furniture- The challenge cable glass, fire extinguishers and similar to be carefully considered in psychiatric wards.

In this project the cost of technical infrastructure rose with approximately 100% due to water treatment, oxygen plant, solar heating, hot water system, sewage treatment, surge arrestor and extended wiring for LAN.

Slowly slowly.

In this projects, as well as projects at home, progress seems to be too optimistic.

One of the problems in this case is the lack of communication from the constructor stating the actual delay. In this case the constructor lost several months due to difficult ground conditions, as well as heavy rain

The answer is sometimes more manpower, but even though labor is inexpensive, it is still a considerable cost and effectiveness might easily suffer with the lack of manpower.

As work goes more slowly it tends to cost more, and it is important to keep track of all extra cost on a monthly basis to avoid the surprise at the end of the day. And also to avoid long and exhausting discussions concerning responsibility, cost and so on.

Another issue is currency. Imported goods are often in USD while bids are in local currency. It is a challenge for the constructor, and then again the buyer, to handle a situation with fluctuation in the currency situation. This issue should be addressed in the bidding phase.

Keep it simple.

Operational cost is always a challenge.

In many cases it is easier to obtain new equipment than getting funds for spare parts and proper maintenance. Also preventive maintenance might be a problem. Small malfunctions might lead to major shortage of critical equipment.

Long term involvement might be needed for education of adequate personnel.



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In many cases there is no lack of competence, rather lack of proper tools and spare parts.

Often a three year service contract comes with the equipment, but such a contract will not cover any aspect of the faults that might occur without being far too costly.

Even though there is a will for high end equipment, a more modest approach is likely to be wiser.

The pictures under shows different phases of the construction.

Typically slabs, columns, all made on site with not too much machinery.



Early phase ground floor.





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Mostly painting, and lots and lots of installation remains.

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The end result – something to be proud of

Bergen 22.11.2017.

Geir Pedersen

(This is an edited version of the article. A full version with all graphics will be printed in Health Estate Journal)

IFHE RIO 2017 – International Seminar

Hospital Environment for Patient and Worker Safety



The city of Rio de Janeiro will be marked in the history of contemporary architecture and hospital engineering, after realized the most important international event to discuss aspects related to health buildings happened in August, 27 to 31. IFHE Rio 2017 - International Seminar was promoted by

International Federation of Hospital Engineering (IFHE) and Brazilian Association for Development of the Healthcare Building (ABDEH).

The IFHE is a global membership body supporting national member associations of architecture and engineering to promote safe, efficient, effective and environmentally sustainable concept, design and facilities management in the healthcare and hospital context.



**Executive Committee of IFHE in the IFHE RIO 2017.
Place: Othon Palace Copacabana, Rio de Janeiro, Brazil.**

The event started on August 27 and was extended for 5 days with multiple activities. On the first day, the Executive Committee Meeting of the IFHE was held, where, among other matters, it was decided to change its name to the International Federation of Healthcare Engineering, preserving the IFHE acronym. This Committee is composed of one representative from each of the following countries: South Africa, Germany, Argentina, Australia, Canada, Netherlands, Italy, Japan, Norway, United Kingdom, United States and Brazil.



The IFHE Executive and Council Meeting in the Thon Palace Copacabana, Rio de Janeiro, Brazil, August,28, 2017.

More than 300 participants from 32 countries of all five continents and their respective representations have been discussing issues relating to the safety of the health environment for patients and workers in health care. This issue had been one of the most important concerns of the World Health Organization (WHO) in this century and also had been accompanied by the institutional healthcare agencies of each country. In Brazil, the Ministry of Health has dedicated special attention to patient safety care with recommendations for specific procedures and regulations.

The II Meeting of the Regional American Group was held on August 29, with the participation of all IFHE countries in the continent (Brazil, Argentina, Chile, Uruguay, Paraguay, Colombia, Costa Rica, Cuba and Mexico). And with the special guests from America Latina (Peru, Bolivia, Guatemala) and North Americans (USA and Canada). Agreements of cooperation of knowledge were signed between the different countries and, at the same time, confirmed the agenda for the next years with Meetings in Santiago (Chile) in 2018 and Bogota (Colombia) in 2019.



Regional America Group and Executive Committee of IFHE RIO 2017. Place: Othon Palace Copacabana, Rio de Janeiro, Brazil.

During the event, the book Health Architecture in Latin America (Arquitectura para Salud en América Latina) was launched in Spanish and English and will be available online in October, 2017. The book was organized by architects Fábio Bitencourt (Brazil) and Luciano Monza (Argentina) and has chapters with references to architecture for health in the following Latin American countries: Argentina, Brazil, Chile, Colombia, Costa Rica, Peru, Mexico, Uruguay and Venezuela. The book was sponsored by the UNOPS (United Nations Office for Project Services) entity linked to the World Health Organization (WHO) and also was supported by the architectural and engineering associations for health environments in these respective countries, as well as ABDEH in Brazil. Most of these associations are IFHE Members.

In addition to regular International Seminar programming, two workshops were held with approaches of special relevance for discussion on the future of hospital buildings and other health settings. The first workshop on "Global Innovation for Healthcare Sustainability" was held on August 29th, which addressed the environmental

impacts on people's health, current mitigation and adaptation strategies for climate change. Contemporary studies of climate resilience as well as sustainable solutions in health environments were also presented. This event was coordinated by the North American engineer Walt Vernon, Member of the IFHE Executive Committee, with the participation of Shannon Bunsen and Laura Faye. Vernon is the founder and leader of the Sextant Foundation, a nonprofit organization for sustainable projects and co-author of the upcoming WHO book, *Health in the Green Economy: a prescription for the Global Health Sector*.



Workshop Global on Innovation for Healthcare Sustainability, August, 30, 2017.

On August 30th, a workshop on "Electrical Patient Safety Regulator Requirements and Responsibilities for Electrical Safety of Patients in Health Care Facilities" was held. The discussion was on the technical requirements for the implementation of the electrical safety of patients in surgical and life support environments, in accordance with the normative requirements in force in several regions of the world. This event was coordinated by the Brazilian engineer Sérgio Castellari, an international expert on the subject.

Workshop Global on Electrical Patient Safety Regulator Requirements and Responsibilities for Electrical Safety of Patients in Health Care Facilities, August, 30, 2017.

All participants also had the opportunity to participate in technical visits to the various hospitals in the city of Rio de Janeiro, divided into groups in the morning and afternoon with access and technical guidance to the following health facilities: UNIMED Hospital, Star Hospital Cup, Hospital das Américas, Hospital da Lagoa, Sarah Network

Hospital, Institute of Traumatology and Orthopedics (INTO), Family Health Clinic and Souza Aguiar Municipal Hospital.



Architects and engineers participating in IFHE RIO 2017 during a visit to the Sarah Network Hospital in Barra da Tijuca, Rio de Janeiro, Brazil, August, 2017.



Visit to the UNIMED Hospital in Barra da Tijuca, Rio de Janeiro, Brazil, August, 2017.



Additional visits were also made to the Santa Casa de Misericórdia in Rio de Janeiro, the first hospital built in the city by the Jesuit José de Anchieta in 1582 and still carrying out health care activities.

At the end of the event was presented by Australia's representatives, Darryl Pitcher and Darren Green, the special invitation to the upcoming IFHE Congress to be held in the City of Brisbane, Australia, in October 2018. A great opportunity to know the important Australian health care model, while at the same time getting to know some of the architectural and engineering hospital facilities.



The Brazilian architect Fábio Bitencourt (Brazil) between the Aussie engineers Darryl Pitcher and Darren Green. Rio de Janeiro, August, 2017.

Fábio Bitencourt

IFHE RIO 2017, August, 06, 2017.



IFHE 2018

BRISBANE, AUSTRALIA



25th Congress of the International Federation of Hospital Engineering, 6-11 October 2018, BCEC Brisbane, Australia

Dear Gunnar,

The Institute of Healthcare Engineering, Australia (IHEA) is pleased to invite you to the 25th Congress of the International Federation of Hospital Engineering (IFHE) to be held on **6-11 October 2018 at Brisbane Convention & Exhibition Centre, Australia**

The IFHE congress attracts delegates and guests from around the world who have an interest in Healthcare Engineering and Facilities Management. The IHEA offers authors the opportunity to share their vision and experience on topics that align with the congress theme **'Healthcare Engineering – Building on Sustainable Foundations'**.

Share your expertise at IFHE 2018 and submit an abstract now! Abstract submissions close on Monday, 4 December 2017.

We look forward to seeing you in Brisbane, Australia in October 2018.

Brett Petherbridge
2018 Congress Convenor

[Congress Website](#)

[Submit Abstract](#)

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The international content committee invites authors to submit an abstract for the 25th Congress of the International Federation of Hospital Engineering 2018.

TOPICS

- Safety, Quality and Risk
- Emerging Health Technologies
- Sustainability and Energy Efficiency
- Healthcare Planning, Design and Construction
- Management and Operation of Healthcare Facilities

- Case Studies and other topics of interest

MODE OF PRESENTATIONS

Presentations may be made in one of the following modes:

- Oral Presentation (20 minutes)
- Oral Presentation (30 minutes)

The final decision will be determined by the Organising Committee.

Click [here](#) to read the abstract guidelines and presenter terms and conditions.

KEY DATES

Registration Open: 1 November 2017

Call for abstract closes: Monday, 4 December 2017

Scientific Program Committee Review Submissions: January 2018

Notification of accepted abstracts: February 2018

Deadline for speaker confirmation and registration: March 2018

Program announced: April 2018

IFHE Congress: 6-11 October 2018

About the Venue - Brisbane Convention & Exhibition Centre

Address:

Cnr Merivale and Glenelg Streets
South Bank, Queensland 4101 Australia
(Entry via the Grey Street entrance)

- The Congress will be held on the **Plaza Level** of the Brisbane Convention & Exhibition Centre (BCEC).
- Plenary sessions will be held in **Plaza Auditorium**.
- The exhibition area & catering will be located in the **Plaza Ballroom**.



Contact us

If you have questions, please contact the appointed conference organisers, Iceberg Events:

Phone: + 61 7 3876 4988

Email: bella@icebergevents.com.au



www.ifhe2018.com

#IFHEcongress2018

This message was sent to g.baekken@stolav.no by Iceberg Events, PO Box 1179 Milton Qld 4064 Australia on behalf of IFHE 2018, hosted by Institute of Healthcare Engineering, Australia (IHEA). Iceberg Events are the appointed conference organisers for the IFHE Congress 2018.

Merry Christmas to you all

