



The Common Services Committee of the ORM

CSC # 15, MEETING MINUTES

Meeting date: 2 April 2020
Place: Videoconference
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Drafted by: Esmeralda Darias
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Committee Members

Mr. Victor Acciari (Chair)
Mr. Marc Balcells
Mr. Romano Corradi
Mr. Alex Oscoz
Mr. Juan C. Pérez Arencibia (Secretary)
Mr. Ennio Poretti
Ms. Saskia Prins

Institution

MAGIC
ING
GTC
IAC
IAC/ORM Admin
TNG
Mercator

Observers

Mr. Thomas Augusteijn
Mr. Jorge Gmelch Ramos
Mr. Daniel Mazin
Mr. Luis A. Rodríguez García
Mr. Pit Sütterlin
Ms. Esmeralda Darias (Minutes Secretary)

NOT
IAC
LST1
GTC
SST

AGENDA

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|---|--------------------------|
| 1 - Welcome and adoption of the Agenda | CSCR 01/20A
(amended) |
| 2 - Approval of minutes of the previous meeting (CSC #14) and outstanding actions | CSCR 02/20A |
| a) CSC outstanding actions | |
| b) CCI outstanding actions | |
| 3 - 2019 provisional accounts for the ORM | CSCR 03/20A |
| a) Common Services | |
| b) Residencia | |
| 4 - Certificate for the 2019 Accounts | CSCR 04/20A |
| 5 - Common Services Budget and Residencia accounts for 2020 | CSCR 05/20A |
| a) Budget forecasts and estimates of the accounts | |
| b) Large - FEDER Projects: ICTS funding | |
| 6 - ORM Administrator management report for 2019 | CSCR 06/20A |
| 7 - Minutes and recommendations from the Safety meeting | CSCR 07/20A |
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| 9 - Any Other Business | |
| 10 - Date and Place of next meeting | |

1 Welcome and adoption of the agenda

- 1.1 At 9:10 the Chair opened the meeting and welcomed participants, mentioning that this was a historical occasion as the meeting would be held by electronic means, due to the state of emergency in Spain.
- 1.2 He praised Ms. Prins for drafting the minutes of the previous meeting, and indicated that Ms. Darias had been hired to do the job this time.
- 1.3 The Chair also asked for permission from the members to record the sound of the videoconference. This was accepted.
- 1.4 The Chair reminded that seven documents would be under consideration and requested comments from members.
- 1.5 Mr. Augusteijn asked to discuss current measures for transport to/from the observatory. It was decided to review it under Item 7 of the Agenda.
- 1.6 The Chair indicated that Mr. Gmelch and Mr. Rodríguez would join the meeting to report on items 7 and 8 of the agenda, respectively.
- 1.7 The agenda (CSCR 01/20A) was adopted as reworded in point 2.4 below.

2 Approval of minutes of the previous meeting (CSC #14) and outstanding actions

- a) CSC outstanding actions**
- b) CCI outstanding actions**

- 2.1 a) See Action Tables 1 and 2 at the end of these minutes.
- 2.2 b) Mr. Pérez Arencibia included at the end of the draft minutes (CSCR 02/20A) an Action List for ORM stemming from CCI #82 (La Laguna, 14th November 2019) (Table 3). The first three items are closed. The repair of internal roads has been carried out in the stretch of the road leading to ING, Mercator and Liverpool facilities. Progress will be monitored by CCI during its next meeting.
- 2.3 The Chair thanked Mr. Pérez Arencibia and asked for further comments.
- 2.4 Mr. Balcells pointed out a formal detail about Item 2 the Agenda (CSCR 01/20A): the minutes are only draft minutes until they are adopted at the current meeting. At the proposal of Mr. Augusteijn, it was agreed to amend the Agenda to read “Approval of minutes of the previous meeting...”
- 2.5 The minutes of CSC#14 (CSCR 02/20A) were approved.

3 2019 provisional accounts for the ORM

a) Common Services

b) Residencia

- 3.1 Mr. Pérez Arencibia introduced document CSCR 03/20A, making reference to Table 1, a summary of income and expenditure for 2019. Different colours in this table relate to budget lines in subsequent tables, which include further details.
- 3.2 The Subtotal (Table 3) shows that 92% of the budget was implemented. The level of implementation for the subtotal remnant is lower, due to actions or projects in hand which require permits to proceed. Line 20 was overspent because it was not possible to make a renting agreement and the vehicle was purchased. Staff costs increased due to a national salary increase.
- 3.3 Tables 4 and 5 include details for budget line 72 and remnants, in particular progress of work. Annex 2 shows the balance of General Maintenance (line 71).
- 3.4 Regarding Table 5, Mr. Pérez Arencibia said the work for installing PV panels for the Residencia had been completed, but the environmental report for the fuel tanks has not been received, i.e. it will be carried over to 2020. He was optimistic that after seven years the work could finally be completed in 2020.
- 3.5 Table 7 shows details of expenses, and contributions of Residencia and UIs. Mr. Balcells wanted to know why the total expense was so large (811,850.04 €), taking into account the small income. Ms. Prins explained that this reflected that remnants from previous years had not been spent due to unfinished projects, and insisted that she would like to see separate accounts of unspent earmarked money for each financial year, instead of including it in the total spent. After some discussion about the method of representing these figures and the different accounting systems of each country, it was agreed to follow up this matter in a separate meeting with Mr. Pérez Arencibia, Ms. Prins and Mr. Augusteijn, and somebody from the IAC Accounting Section (maybe Mr. Jesús Burgos), in order to clarify this item for the Committee.
- 3.6 On item 3 of document CSCR 03/20A, the Chair asked for comments from Mr. Pérez Arencibia about the benefit of 38,766.43 € shown in Table 8. He said that occupancy had increased greatly to record levels, mostly due to LST1 activities, but with lower room rates. The surplus was lower than in the previous year (2018), and its use might be redefined by the CSC.
- 3.7 Figure 1 represents Residencia expenditure and the relative impact on total expenditure of each item.
- 3.8 The working capital at the end of 2019 was 98,766.43 € (Table 9). Annex 1 of CSCR 03/20A shows further details.
- 3.9 Mr. Pérez Arencibia said that an agreement was required to transfer the 2019 remnant to 2020, as well as to decide the use of the surplus. Mr. Balcells reminded the Committee that in 2019 it was agreed that anything in excess of 60,000 € of working capital would be used to pay for common services, but Ms. Prins said that some agreed renovations were still awaiting completion. The Chair suggested taking these decisions under Item 5 below.

4 Certificate for the 2019 accounts

- 4.1 Mr. Pérez Arencibia presented CSCR 04/20A, a certificate in Spanish by Mr. Burgos, IAC Head of Administration, that the ORM Common Services Budget and Residencia accounts were to be included in an audit by the Intervención General de la Administración del Estado of the IAC accounts. Mr. Pérez Arencibia pointed out that the surplus in this document is labelled as “benefit” (it’s a widely-used Spanish term), and that the document states the same figures as those submitted to CCI.
- 4.2 CSC should recommend provisional approval by CCI of 2019 accounts, pending the State audit in June.

5 Common Services Budget and Residencia accounts for 2020

a) Budget forecasts and estimates of the accounts

b) Large - FEDER Projects: ICTS funding

- 5.1 Mr. Pérez Arencibia introduced document CSCR 05/20A, which includes the CSB 2020 approved by CCI (Tables 1 and 2).
- 5.2 Table 3 is a proposal for using the remnant from previous years, showing what had been allocated and has not been executed. The aim is to show how funds will be used, although it remains to discuss how to make this Table clearer.
- 5.3 Regarding Item 2 (Residencia Income/Expenditure 2020), Table 4 shows the income forecast, using the mean occupancy for the last 10 years and no change in room price, and the estimation of Residencia expenditure. A further column has been added to the standard model to show the potential effect of the international Covid-19 health emergency. This takes into account that the Residencia remains unoccupied for two months with a consequent slight reduction in expenses (water, power, fuel, etc.), although it is unknown whether ORM will resume its activities in this period.
- 5.4 The health emergency poses questions about the management of several contracts, particularly the Residencia contract. For instance, some cleaning activity (three days per week) has to be maintained as there is a security service. No instructions have been received from the Ministry so far about this kind of contract, and that is the reason why the total amount is included in the Residencia forecast.
- 5.5 The Chair considered this estimate realistic but enquired about the likely reduction in costs. Mr. Pérez Arencibia pointed out that the working capital considered is 60,000 €. If Table 4 was accepted as shown, with inactivity for two months, at the end of the year it would reduce to - 35,000 € (Table 5). The Committee expressed its dismay at this, considering that the working capital covers unpaid debts, which amount to over 80,000 € from last year. Mr. Pérez Arencibia said that this is due partially to UIs being billed on 31st December each year, when debts are accounted for. He showed the Committee a list of debtors and amounts due as of 31st March 2020, and the debt has reduced to 11,640 €.
- 5.6 Mr. Balcells suggested proposing to the CCI that due to this year’s extraordinary circumstances the Residencia working capital remnant (around 98,000 €) was kept as such and not used for improvements, in order to compensate for a negative balance. There ensued a discussion about possible reductions in costs and/or services within the many uncertainties the pandemic represents. A decrease in Residencia estimated income would also be possible, given that visitors would not necessarily come back when activities were resumed.

- 5.7 The Committee asked that ways to reduce expenses as much as possible were studied. Mr. Balcells wanted to add that this approach seemed sound as every model made so far for Residencia Income/Expenditure had been conservative, with outturn always being higher than expected.
- 5.8 It was agreed to incorporate Residencia working capital remnant in this year's budget to compensate for losses. It was also agreed to report to the CCI that the CSC was unable to propose any solution to prevent a negative working capital at the moment, given the scale of the crisis, and that this will be reviewed during the autumn meeting.
- 5.9 Mr. Corradi wanted to know why there had not been a reduction in electricity costs, after the PV panels have been installed. Mr. Pérez Arencibia indicated that 80% of the power used by the Residencia in day-time is generated by the panels, but this is not reflected in Table 4. Every month a bill is issued by Endesa, and the real generation and use of power is known but this information was not included in the Table because the data correspond to winter, with fewer hours of sun. It was agreed that these figures were presented at the next meeting and forwarded to the Observatorio Sostenible group.
- 5.10 Regarding Item 3 (Progress on ICTS Projects and New Strategic Plan for OOCC), Mr. Pérez Arencibia draw the attention of the meeting to page 7, which includes a coloured table with the status of different projects, and deadlines, cost and permit status for each of them. Proceedings for the fuel tanks are more advanced, while the evapo-transpiration project requires an Evaluación Ambiental Ordinaria, which is a long and rigorous process. Deadlines for completion, however, cannot be changed, as they are set by the Ministry.
- 5.11 Mr. Corradi mentioned that GTC was assessing alternative solutions with TNG, as the idea of having an evapo-transpiration tank near the telescope was a matter of concern. GTC was not invited to the meeting where the decision to use this type of system was taken, and a better solution would imply a better use of the funds. The Chair expressed interest in CSC being informed about progress.

6 ORM Administrator management report for 2019

- 6.1 Mr. Pérez Arencibia presented document CSCR 06/20A.
- 6.2 Occupancy (Item 1) was high throughout the year, with a large increase of stays due to LST1.
- 6.3 Regarding visits (Item 2), Mr. Pérez Arencibia said Table 4 shows a large increase in the number of visitors and praised a new GTC system, which includes much information about visiting groups (general visitors, staff, VIPs, etc.). He believed it would be useful for other telescopes.
- 6.4 Mr. Corradi indicated that GTC would be happy to distribute their web-based application. This application includes all types of visits, is relatively easy to maintain, and has an emoji rating scale (four ratings) for visitors to report their level of satisfaction. Analysis of the ratings indicates that 97% of visitors were very satisfied and 2% satisfied, and visitors considered that guides do a very good job. Mr. Corradi indicated that adapting their tool for the ORM as a whole would require further study.
- 6.5 Mr. Balcells wanted to know if the decision about management of visitors was being changed through the use of the GTC application, because a change of model had not been agreed by the

CSC and there had been no notification about that possibility; the agreed procedure was to have an IAC-run common tool. Mr. Pérez Arencibia replied that the GTC permitted use of their tool, which allowed IAC to arrange special visits and allowed guides to book the required slots themselves. The IAC calendar was ready for implementation and was very simple to use; it could be used by ING. But the GTC tool was ideal for the future. He suggested that IAC further developed it to encompass all willing UIs, which would have to provide slots for visits to their facilities.

- 6.6 New guides have been trained by the Starlight Foundation. They need further training, on safety at telescopes and on the characteristics of each telescope. Guided groups would be able to access GTC and WHT (during work with WEAVE, it would be the INT), but it would be good to have simultaneous visits to more facilities.
- 6.7 The use of 'guide' as an official title conflicts legally with the role of tourist guides. The Government of the Canary Islands understood that ORM needed people to help with visits to their facilities, and that visits started at a meeting point and were unrelated to bus tours. However, it would not allow the use of 'guide' to describe Starlight guides. The Foundation has to identify and agree on a new designation for this activity.
- 6.8 Regarding Item 3, Services at the Residencia, Mr. Pérez Arencibia mentioned that around 400 feedback forms had been sent out and 106 returned. Table 5 summarised the users' feedback, which included concerns about the use of plastic. Progress was being made on the Wi-Fi service. The average rating of Residencia was 4.2 out of 5.
- 6.9 Mr. Poretti mentioned that in the last weeks there were a few complaints from visiting astronomers about packs in the fridge sometimes having passed their best-before-date, and about low temperature in the Annexes during the winter.
- 6.10 Item 4, Other Information, included data about fuel, water and power consumption; the latter showing a marked increase. Mr. Pérez Arencibia said this was probably due to LST commissioning, and pointed to Table 7 showing the percentage of 2019 consumption by each UI.
- 6.11 Regarding Maintenance (Item 5), Mr. Pérez Arencibia pointed to Table 8 showing waste collection services. Table 9 summarises the annual preventive and corrective work carried out by common services staff, and Table 10 provides details.
- 6.12 Regarding Purifying Plants (Item 6), the current maintenance contract was highlighted. In February, flow meters were installed at the output of the Residencia plant for better control of discharge parameters. They provide data in real time.
- 6.13 Regarding PV panels (Item 7), Mr. Pérez Arencibia indicated that they are meeting around 73-86% of Residencia day-time demand. A table and a diagram showed data for the first quarter of 2020, where grey was the PV production and red the energy requested by the network when the panels were generating.
- 6.14 Regarding Item 8, Cabildo-related activities, Mr. Pérez Arencibia reported that everything related to the Visitor Centre would be delayed due to the pandemic. IAC was trying to formalise an agreement with the Cabildo and the Garafía Municipality for the operation of the Visitor Centre, but wanted a highly-qualified professional as director. The Visitor Centre will have an evapo-transpiration system for wastewater purification.

- 6.15 If delays caused by the pandemic were not too long, the water supply and wastewater plants would probably be finished during the current year. There was no further information on CATELP.
- 6.16 The Chair asked about the status of KVA. Mr. Pérez Arencibia said that a local company had been selected to start dismantling in March. Now, they would probably not be able to start until November. The 14-inch telescope had been removed, but the other one was still in the building. It had been donated to Garaffa for its museum. This was the first telescope which operated on site.
- 6.17 Mr. Balcells informed the meeting that the first telescopes used in La Palma in 1971-1974 had been found in Australia, which was happy to ship them to the island once ownership was determined. They would be part of the exhibitions at the Visitor Centre.

7 Minutes and recommendations from the Safety meeting

- 7.1 The Chair welcomed Mr. Gmelch and Mr. Rodríguez, who joined the meeting after a break. The meeting was then resumed and dealt with Items 7 and 8 of the agenda, while discussion on Item 6 was held afterwards.
- 7.2 Mr. Gmelch reported that, as shown in the minutes CSCR 07/20A, the Safety Committee (SC) meeting focused on the state of emergency in Spain.
- 7.3 Regarding the Emergency Plan and the Intervention Team, Mr. Gmelch mentioned that the company in charge of studying the plan had not been able to provide the final document. The SC awaits directions from this company to identify required improvements and training.
- 7.4 The Chair brought up the issue of communications on weather and road conditions (Action 14.8, Table 2).
- 7.5 Mr. Gmelch mentioned that, given the special current situation, the general mailing list was not used as this would generate an unnecessary load of emails when the real issue was control of vehicles. He reported that a small WhatsApp group had been created to identify who was travelling to/from the ORM either daily or weekly, keeping the focus on those on the road. Members of this reduced group referred the information to their own UIs. There was a schedule setting times of travel, but these were flexible to adapt to different requirements (such as weekend or single-vehicle travel). His opinion was that exceptional circumstances such as these, required coordination.
- 7.6 Mr. Augusteijn wanted clarification about how information was conveyed (what information via WhatsApp and what via email), which criteria had to be satisfied to allow travelling to/from the ORM, why travelling had to be in convoy, what were the boundaries between levels of operation, and who had the authority to take decisions (IAC, civil authorities, Safety Committee). In his opinion, the SC could not decide, the CSC had only received a draft protocol and there was not a common agreed position. Mr. Gmelch indicated that the only forum where possible scenarios had been discussed was the SC during an extraordinary session, at which the invited NOT representative was not present.
- 7.7 Both the Chair and Mr. Gmelch said that the objectives behind grouping vehicles were to avoid the authorities stopping staff on the road (Guardia Civil was controlling movements of people

and vehicles), and safety in case of accidents. In an emergency, the accepted protocol would have to be followed, and IAC must be aware at any time of who was present at the ORM.

- 7.8 Mr. Pérez Arencibia pointed out that the extraordinary session of the SC on 25th March –the minutes of which were shared onscreen– allowed learning about the implications of the state of emergency. On this basis, the Committee defined three levels of operation and, when IAC decided closing the Residencia, ORM moved to Level 2.
- 7.9 Mr. Gmelch said that, for instance, LST wanted an external company to go up to repair some air conditioning problems caused by a storm (expressly forbidden in Level 2). He did not believe this was an essential service, but left the decision to the CSC. There followed a discussion about the possibility of avoiding major damage, on having to make decisions on a case-by-case basis and on the fact that UIs had to be responsible for their own decisions, as they knew their staff requirements. Mr. Pérez Arencibia stressed that Mr. Gmelch interpreted what the SC agreed in its protocol of 25th March and was in charge of coordinating convoys, because instruments and equipment had to be preserved, but he did not ask for the reasons for staff trips. He gathered information from UIs and an Excel document of vehicle trips was kept, which could be provided to authorities should they require it. Mr. Pérez Arencibia added that the protocol had been notified to the Guardia Civil and the Dirección General de Seguridad and that, unless authorities state otherwise, this document was subject to decisions by majority. If anybody needed to go to the ORM, Mr. Gmelch should be notified and that information would be relayed to the rest of the WhatsApp group and to the security service.
- 7.10 Mr. Balcells wanted to know if it would be possible to have a written version of the draft protocol to agree on a procedure. Mr. Rodríguez said that a working framework had been defined in two meetings, as the SC was well aware of what happens in bad weather and could foresee complications ahead, such as an uncoordinated closure by authorities. Of course, the agreed protocol could be improved, but at the time it was not possible to wait. He added that another meeting might be held to analyse how to adapt the current protocol to the new government measures for next week. UIs should report their doubts so that the SC could give them due clarification.
- 7.11 Mr. Pérez Arencibia commented that non-standard emergency situations had already been notified to IAC, such as an interruption of power supply, and would be forwarded to the SC. He emphasized that if the Committee had not met as it did, UIs would now be totally lost. There was room for improvement but the government guidelines had to be taken into account.
- 7.12 The Chair agreed that the role played by the SC had been very good, expected it to produce a written version for the CSC and recommended waiting for the results of its new meeting in the changing situation.
- 7.13 The Chair insisted that communication channels needed clarification. Vehicles might use radio, but these had limitations. Access to instant communications, such as messaging services of several social media, was considered. This item should be included in the protocol.
- 7.14 The Spanish government decreed a lockdown to 9th April and up to then the ORM should remain in Level 2. Any changes would be notified by authorities with plenty of time to react. The Chair proposed to continue this conversation through email. He thanked Mr. Gmelch for his intervention and the contribution made by the SC.

8 Report on Observatorio Sostenible group

- 8.1 The Chair expressed his opinion that this group represented an opportunity to push forward sustainability issues on the island. Mr. Pérez Arencibia shared a document, in English and Spanish, which had been forwarded by Mr. Rodríguez on the previous day, and which would be circulated to all the members.
- 8.2 Mr. Rodríguez said that the Observatorio Sostenible group (OSG) was now at work. It was made up of representatives of most UIs, with Mr. Roberto Pérez López, IAC, as secretary and himself as Chair. In the two meetings held to date a reference framework had been established for impact areas (mobility, energy, waste and water) and enabling actions (establishment of metrics based on industry 4.0 enablers, identification of Observatory assets, review of logistic systems, organisation of UIs and IAC, incorporation of sustainability requirements into projects).
- 8.3 Group meetings had focused on the four impact areas, and Mr. Rodríguez noted the possibility of synergies if all UIs took the group's work into account.
- 8.4 Mobility had been much discussed in the meetings. One of the group's conclusions was that use of hybrid vehicles was not appropriate for the ORM, and that a combination of internal-combustion-engine and electrical vehicles should be used.
- 8.5 Regarding energy, the group focused on PV facilities at the ORM (current and planned), and proposed sharing dashboards, or even real-time data on PV use and savings, for staff and general public, as this could lead to energy savings. It was also stressed that there is a need to know how electricity use is measured and billed, to determine the power used by each UI, which is incorporated to Action 3 of Actions proposed to the CSC in the group's report.
- 8.6 A representative of La Palma Renovable attended the second meeting of the group and provided interesting input about reduction of the carbon footprint, and EU funding for innovative sustainable pilot projects.
- 8.7 The Chair stressed how important this European financing could be, as the ORM was one of the largest power consumers in the island, and could become a driving force for other companies in La Palma through supporting projects.
- 8.8 Regarding waste, aside from reporting about reuse, legal compliance for traceability issues and centralised waste management, the OSG asks the CSC about the possibility of re-assessing the use of evapo-transpiration tanks, as both their performance in the conditions at ORM (ice, snow, high altitude) and their environmental impact were unknown. The OSG proposed studying the use of evaporators inside the facilities (Action 2). Mr. Pérez Arencibia said that the subject had already been mentioned during the meeting and would be reconsidered.
- 8.9 Regarding sustainable use of water, the OSG had emphasised that all facilities should take action, in particular those under construction, to avoid later problems. The rational use of water would not only reduce pollution, but would improve the sustainability of ORM and reduce the carbon footprint. This would be the case if rainwater, ice and snow were collected. GTC, for instance, is installing gutters with heating resistors for this purpose, transferring the water obtained to fire-fighting deposits. Metrics were needed to determine the savings and the lesser environmental impact.
- 8.10 Another example of use of water was the transportation of tons of plastic-bottled water to the ORM for human consumption. Mr. Augusteijn said that in principle it was possible to cut down

the use of plastic bottles by taking potable water up. However, Mr. Pérez Arencibia informed the meeting that, despite having at the Residencia an approved drinking-water tank, Sanidad carried out an inspection and obliged the use of a chlorination system. This aspect should be clarified but auxiliary chlorination cisterns could be used.

- 8.11 With regard to enablers, the OSG considered installing traffic sensors at the crossroads of the ORM roads in the future to understand the real impact of vehicle traffic on site and to encourage responsible use of vehicles. There are technical solutions that could easily be installed at the ORM. The Cerenkov facilities may have a particular interest in this development, given that they are especially affected by vehicle lights.
- 8.12 The OSG discussed the possibility of having an on-site display to show the PV energy being generated, with a positive message, such as how many tons of CO₂ had consequently not been emitted to the atmosphere. This would help save energy and would reinforce the image of the ORM. Mr. Pérez Arencibia mentioned that there was a PV-production webpage, which could be extended to include further information. He would pass information to the group. The Chair stressed the importance of publicity for renewable energy installations at the observatory, and suggested that Mr. Gmelch be invited to the next meeting in order to learn about the feasibility of this action.
- 8.13 Mr. Rodríguez mentioned Action 4 recommended to the CSC: that sustainability was an integral part of the initial phases of any new project. As an example, he said that, being near the tropics, cooling of computing equipment was a requirement but that there were cloud-based solutions, where servers were located somewhere else, and this kind of issue would have to be taken into account from the design stage.
- 8.14 Mr. Rodríguez mentioned that Action 1 proposes an environmental and sustainability consulting exercise which could contribute to the development of a strategic plan.
- 8.15 Mr. Rodríguez said that interesting recommendations on all aspects had been received from the UIs. He asked the meeting for their total support for the representatives at the OSG so that they were considered the voice of their corresponding UI, as that would lead to contributions from all towards the hard work the OSG had ahead.
- 8.16 The Chair asked for comments on the presentation by Mr. Rodríguez. Mr. Pérez Arencibia conveyed his congratulations to Mr. Rodríguez for his briefing on the OSG work, and offered the IAC full cooperation to supply any information requested.
- 8.17 The Chair thanked Mr. Rodríguez for his intervention and expressed his belief that all CSC members were interested in the work of the OSG.
- 8.18 Mr. Corradi said that CSC could accept some of the actions proposed by the OSG as some of them were already part of CSC work. Mr. Balcells said that he could not accept Action 2 before reading the report and knowing the financial consequences.
- 8.19 Regarding Action 1, it was agreed to ask the OSG to produce a detailed proposal for the CSC to discuss funding at its next meeting. Action 3 and Action 4 were accepted.

9 Any Other Business

- 9.1 None.

10 Date and place of next meeting

10.1 The date and place of the next CSC meeting were set to 1st October 2020, at CALP.

The meeting was closed at 15:05.

Table 1: Closed actions

Action	Title
10.4	<p><i>Mr. Pérez Arencibia will instruct CALP ICT to issue monthly report about each UI data traffic usage</i></p> <p><i>This action is combined with action 14.1 (Mr. Pérez to request from the IT department of IAC a description of data transfer facilities, RedIRIS connection and financial model), whose title changes as indicated in Table 2.</i></p>
12.5	<p><i>Mr. Pérez Arencibia to organize a study about the expected amount of water evaporated from WHT tank, taking into account the water arriving from the telescopes in the area and the prevailing winds</i></p> <p><i>This action is combined with action 14.2.</i></p>
13.10	<p><i>Mr. Pérez Arencibia to request from the Consejo Insular de Aguas to lower the frequency of obligatory waste water analysis</i></p> <p><i>Every five years the Consejo Insular de Aguas has to authorize wastewater discharge to the ground. In the new agreement, analyses will now be less frequent because some purifying plants have been connected and consequently there are fewer discharge points. Fewer parameters will now be measured in the three analyses carried out each year.</i></p>
14.3	<p><i>Ms. Prins to recommend closing of 2018 accounts to CCI</i></p> <p><i>CCI accepted the recommendation during its last meeting.</i></p>
14.4	<p><i>Ms. Prins to refer to CCI the changes to the CSB 2019 and the proposals for the CSB 2020 and the distribution formula for its consideration</i></p> <p><i>CCI accepted these in its last meeting.</i></p>
14.6	<p><i>Ms. Prins and Pérez Arencibia to rephrase notes on Distribution table</i></p> <p><i>Mr. Pérez Arencibia has the revised document.</i></p>

Table 2: New and outstanding actions

Action	Title
10.2	<i>Design and place infographics panels about light pollution along the road to the Roque de los Muchachos (coordination by Mr. Pérez Arencibia)</i> <i>This action will be implemented at the time of asphaltting the road.</i>
13.9	<i>Mr. Corradi, Mr. Pérez Arencibia and the environmental working group to study the automation of heating</i> <i>Ongoing.</i>
13.12	<i>Safety Committee to organize update of the general emergency plan for ORM</i> <i>Mr. Pérez reported his opinion that a company is updating the plan, which has not been delivered to the Safety Committee yet.</i>
13.13	<i>UI Safety Responsibles to study coordinated safety training</i> <i>To be checked with the Safety Committee.</i>
14.1	<i>Re-organising billing and financial model of data communications</i> <i>Mr. Pérez Arencibia noted that reports on data traffic up to December have been issued. IAC is negotiating a new contract for net services with Telefónica, which will probably be awarded before September. He also informed that this new communications agreement would allow decisions to be taken on data transfer facilities (UIs may request specific lambdas or 10Gb wide bands).</i> <i>Mr. Pérez Arencibia proposed to set up a small group to look into this new contract, as the Telefónica invoicing system has to be understood before the distribution of communication costs is proposed to the CSC. This group could also discuss the connection to RedIRIS. Members were invited to show their interest in the creation of this group and to propose candidates.</i>
14.2	<i>Mr. Pérez Arencibia to request from Chair of SUCOSIP to present document on evaporation effects</i> <i>Input from the company which made the project is expected. SUCOSIP wants to set up an experiment to carry out the required measurements.</i>
14.5	<i>Mr. Pérez Arencibia to prepare revised tables for CSB2020 with new table with expected expenditure related to projects from previous financial years</i> <i>New table includes information about every project. To be discussed during meeting.</i>
14.7	<i>Mr. Pérez Arencibia to refer concerns about Starlight guide course to Cabildo and Starlight Foundation</i> <i>Contact with Cabildo showed that this institution was happy to support guide training, and that it was coordinated with Starlight Foundation. However, trainees were led to think that they could start telescope tours immediately, and this is not possible (for instance, due to the different ways of managing different groups or due to the fact that the number of visits will not change).</i> <i>Mr. Pérez Arencibia reported that the Starlight Foundation is organising courses all over Spain to train guides but they do not seem to grasp the ORM concerns.</i> <i>To be discussed during meeting under visits in the Site Management Report.</i>
14.8	<i>Mr. Pérez Arencibia to make sure daily reports on weather and road conditions are restored ASAP</i> <i>These reports are updated on the webpage, but only sent to the ORM general mailing list under alert or pre-alert conditions. Members considered daily reports should be sent via WhatsApp and email. Mr. Pérez Arencibia pointed out that emergencies were communicated only to a small WhatsApp group, which in turn inform their own UIs. The Chair believed that the action itself was concluded, and proposed to clarify the matter with Mr. Gmelch during the meeting.</i>
15.1	<i>Mr. Pérez Arencibia to organise discussions with Ms. Prins, Mr. Augusteijn and, if possible, Mr. Burgos to clarify the presentation of figures corresponding to remnants from previous years</i>
15.2	<i>Mr. Acciari to recommend provisional approval of 2019 accounts to CCI</i>

15.3	<i>Mr. Pérez Arencibia and Mr. Acciari to study ways to reduce expenses at the Residencia as much as possible</i>
15.4	<i>Mr. Pérez Arencibia to incorporate Residencia working capital remnant in the 2020 budget</i>
15.5	<i>Mr. Acciari to report to the CCI that the CSC was unable to propose any solution to prevent a negative working capital at the moment, given the scale of the crisis, and that this will be reviewed during the autumn meeting</i>
15.6	<i>The Committee to review the Residencia financial situation, in particular the working capital, during its autumn meeting</i>
15.7	<i>Mr. Pérez Arencibia to produce a report with figures of real generation and use of PV power at the Residencia, as well as savings in electricity costs for the CSC and the Observatorio Sostenible group</i>
15.8	<i>Mr. Corradi to report to CSC on assessment of alternative solutions for purifying wastewater</i>
15.9	<i>UIs to study adapting GTC visitors' management tool for the whole ORM</i>
15.10	<i>UIs to report doubts on the minutes of their 25th March meeting (draft state of emergency protocol) to the Safety Committee for clarification</i>
15.11	<i>Mr. Pérez Arencibia to forward to the Safety Committee the non-standard emergency situations notified to IAC</i>
15.12	<i>Safety Committee to produce a written version of the draft state of emergency protocol (including communication channels) for CSC to agree on procedures</i>
15.13	<i>Mr. Pérez Arencibia to forward the Observatorio Sostenible group report to CSC members</i>
15.14	<i>Mr. Acciari to invite Mr. Gmelch to a meeting of the Observatorio sostenible group to explain how power use is measured and billed, and to help studying the feasibility of having a public display on PV production and use, taking data from the PV webpage</i>
15.15	<i>Mr. Acciari to ask the OSG to produce a detailed proposal on the environmental and sustainability consulting contract for the CSC to discuss funding</i>

Table 3: CCI # 82 ACTION LIST FOR ORM (La Laguna, 14th of November, 2019):

1257	<i>Close the 2018 ORM CSB Accounts. Closed.</i>
	<i>Transfer the excess Residencia working capital above 60k € to the LTP. Closed.</i>
	<i>Implement the Distribution table to apportion each UI its contribution to the 2020 CSB and communicate the corresponding details in advance of invoicing the UIs. Closed.</i>
	<i>Repair as soon as possible the severely deteriorated parts of the internal roads' surfaces and implement the most appropriate strategy to minimize the future impact of the new power line installation on the road surface. Closed.</i>