

**7<sup>TH</sup> EAST ASIA HYDROGRAPHIC COMMISSION  
STEERING COMMITTEE MEETING  
5<sup>TH</sup> – 7<sup>TH</sup> FEBRUARY 2020  
TOKYO, JAPAN**

**A1: Opening Address**

1. The Chair of the EAHC, Vice Admiral Yukihiro Kato, delivered an opening speech and expressed Japan's great honour to host the 7<sup>th</sup> East Asia Hydrographic Commission (EAHC) Steering Committee (SC) meeting. He welcomed the participants to Tokyo and expressed his heartfelt gratitude for their attendance. The Chair also expressed his sympathies to the Chinese delegation for the difficulties caused by the outbreak of the coronavirus. Lastly, he highlighted the diversification of hydrographic needs and related challenges, and hoped for fruitful and friendly discussions. The full speech appears as **ANNEX 1**. The list of participants appears as **ANNEX 2**.
2. IHO Director Captain Abri Kampfner delivered a speech to the EAHC MSs. He expressed his pleasure to be attending the meeting and highlighted the important role played by the regional hydrographic commissions, especially for the coordination, implementation and assessment of IHO initiatives. The IHO Director also expressed his gratitude to Japan for hosting the meeting and emphasized that the meeting presents an excellent opportunity to assess the regional situation and identify key priorities, particularly in light of the diversification of hydrographic needs. The full speech appears as **ANNEX 3**.

**A2: Adoption of Agenda**

3. The EAHC SC agreed to adopt the draft agenda. The adopted agenda appears as **ANNEX 4**.

**A3: Report on IHO Activities**

IHO Report

4. The IHO Director gave a presentation on the IHO activities, focusing on corporate affairs, hydrographic standards and services, interregional cooperation and support, and the IHO secretariat's operations. The presentation appears as **ANNEX 5**.
5. The EAHC SC noted the IHO report.

Report on Issues from the 3<sup>rd</sup> IHO Council

6. The EAHC Chair explained the outcomes of the 3<sup>rd</sup> IHO Council, held in

Monaco on 15-17 October 2019, to EAHC MSs. The presentation appears as **ANNEX 6**.

7. The ROK asked if there would be any impact on the EAHC arising from the proposed amendment to IHO Resolution 2/1997 (Establishment of RHC). The Chair (EAHC) explained that there should not be any significant impact as the EAHC is largely operating in accordance with the proposed amendment.
8. The ROK pointed out that EAHC-level discussions and actions in relation to the S-100 Implementation Strategy may be required.
9. The Chair (IRCC) reported that another important topic of discussion at the IHO Council was funding for capacity-building activities. It was noted that capacity building is a key area of the IHO and one in which the IHO has a track record of success. There was also discussion of the possibility that Member States contribution to the IHO may be increased to make available more funds for capacity-building activities.
10. The IHO Director reported that the IHO Council tasked the IHO Secretary General (IHO SG) to liaise with the IMO regarding S-100 implementation. The IHO SG made a proposal to the IMO's Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) to make S-101 ENC's available from 2024. The Sub-Committee acknowledged the ongoing efforts of IHO to develop and test S-100 based data product specifications, as well as the proposed introduction of IHO's S-101 ENC's as a transfer standard for official charts in ECDIS. NCSR 7 agreed that the amendments to resolution MSC.232(82) (ECDIS Performance Standards) could be considered at the 8<sup>th</sup> session of NCSR in 2021 under the existing output on the Committee's post-biennial agenda on "Revision of ECDIS Guidance for good practice. The IHO Director requested MSs to engage with their national authorities to lend greater support for these efforts going forward.
11. The EAHC SC noted the IHO Council report.

Action Item:

AI 1 - The EAHC SC to discuss the S-100 implementation plan at the EAHC level, if the proposed S-100 Roadmap is accepted by the IHO Assembly.
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#### IHO Innovation and Technology Lab

12. SG gave a presentation on the proposed IHO Innovation and Technology Lab. The presentation appears as **ANNEX 7**.
13. ID, JP, the ROK, and the US expressed support for the proposal.

14. The EAHC SC noted SG's presentation on the IHO Innovation Technology Lab.

#### Establishment of an IHO e-Learning Center

15. The Chair (TRDC-BOD) gave a presentation on the proposed establishment of an IHO e-Learning Center. The Chair (TRDC-BOD) explained that, if the proposal is accepted, the ROK can provide its e-learning platform. In addition to the platform, the IHO will need to develop guidelines for the e-learning system. The presentation appears as **ANNEX 8**.
16. ID, PH and SG expressed support for the proposal
17. The Chair (IRCC) stated that there has been much discussion to date by the IHO regarding e-learning and pointed out that it would be worthwhile for the ROK to directly engage the IHO Capacity Building Sub-Committee (CBSC) and IHO International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC) regarding the proposal.
18. The Chair (IHO HSCC), Rear Admiral Luigi Sinapi, pointed out that e-learning was also discussed at the 1<sup>st</sup> session of the IHO Assembly and that the lessons learnt and points raised during those discussions should be taken into account.
19. The US pointed out the importance of ensuring the compatibility and continuous maintenance of the e-learning content. The ROK agreed and explained that the development of IHO guidelines for the e-learning system will serve that purpose. In particular, it will be necessary to incorporate some form of learning management system.
20. The EAHC SC noted the TRDC-BOD report.

#### **A4: Report on EAHC Activities**

##### CHC

21. The Chair (CHC), reported the key outcomes of the 8<sup>th</sup> CHC meeting held in Singapore on 27-28 June 2019. The presentation appears as **ANNEX 9**.
22. The Chair (TRDC-BOD) reported that the C-55's importance for East Asia, including the need for MSs to update it, was also discussed at the 11<sup>th</sup> TRDC-BOD meeting. The Chair (CHC) commented that one incentive for MSs to update C-55 is that hydrography is one of the mandatory areas for IMO audits. SG added that, besides updating C-55, MSs must also identify areas that need surveying. Furthermore, different MSs seem to have different interpretations of the purpose and significance of C-55 and EAHC needs to ensure that MSs are aligned in their interpretation of C-55. In addition,

Member States were also urged to support crowdsourced bathymetry to help cover the gaps in less surveyed areas.

23. The EAHC SC noted the CHC report.

#### EA-RECC

24. As the Head of the EA-RECC, HK (China), reported on the activities of the EA-RECC since the 6<sup>th</sup> EAHC SC meeting. The presentation appears as **ANNEX 10**.

25. The EAHC SC noted the EA-RECC report.

#### EAHC-MSDI WG

26. The Chair (EAHC-MSDI WG), reported on the key outcomes of the 2<sup>nd</sup> EAHC-MSDI WG meeting held in Singapore in June 2019. The presentation appears as **ANNEX 11**.

27. The EAHC SC noted the EAHC-MSDI WG report, as well as the growing national activities on MSDI and the sharing of MSDI-related experiences among MSs.

#### Decision:

D 1 - The EAHC SC approved the work plan, which appears as <b>Annex 12</b> , for the EAHC-MSDI WG for 2019-2021.
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#### Action Item:

AI 2 - MSs to provide their inputs to the IHO MSDI questionnaire before the 3 <sup>rd</sup> EAHC-MSDIWG meeting.
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#### TRDC-BOD

28. The Chair (TRDC-BOD) reported the key outcomes of the 10<sup>th</sup> TRDC-BOD held in Tokyo on 3-4 February 2020. The presentation appears as **ANNEX 13**.

29. ID explained its proposal to host a self-funded regional MSDI workshop, to be held after the 3<sup>rd</sup> EAHC-MSDIWG meeting. The aim of the workshop would be to share knowledge regarding how to implement regional MSDI. Participants from other regional hydrographic commissions would also be invited to attend.

30. KH commented on the technical visit by the EAHC to KH. The aim of the visit was to engage with high-level officials and convince KH to become an IHO member, as well as to develop KH's technical capacity. Furthermore, the

UKHO also attended the visit and continued to work with KH.

31. BN shared its experience of hosting a training course on risk assessment for hydrographic surveys and charting management for safe navigation. It was a successful and valuable experience, with a number of lessons learnt. BN expressed its hope to contribute further to the EAHC by hosting various seminars, courses, etc., going forward.
32. ROK pointed out that the EAHC's self-funded capacity-building programmes, especially its TFT regional training programmes, are having a major impact, not only at a regional level but also within each MS. It is important to raise greater awareness of this at the IHO level. The IHO Director encouraged the EAHC to actively inform the IHO CBSC of the impressive self-funded capacity-programmes that the EAHC is running and believed that they can be useful references for other IHO MSs.
33. The EAHC SC noted the TRDC-BOD report.

Decisions:

D 2 - The EAHC SC approved Indonesia's proposal to host a self-funded regional MSDI workshop in 2020.

D 3 - The EAHC SC approved the proposed capacity-building programs for 2021.

Action Item:

AI 3 - ID to host a regional MSDI workshop after the 3<sup>rd</sup> EAHC-MSDIWG meeting.

EAHC Statutes Review Working Group (EAHC-SRWG)

34. The Chair (EAHC-SRWG) explained the work to develop a draft Terms of Reference (ToR) for the EAHC-SRWG. The presentation appears as **Annex 14**.
35. The EAHC SC reviewed the draft ToR.

Decisions:

D 4 - The EAHC SC approved the draft ToR, which appears as **Annex 15**.

D 5 - The EAHC SC appointed CN, ID, JP, MY, PH, ROK, SG and TH as members of the EAHC-SRWG.

**A5: EAHC Membership Status**

36. The Chair recalled that for a country to become a full member of the EAHC, it must be a member of the IHO and receive endorsement from all MSs of the EAHC. VN has joined the IHO. It has received endorsement from most MSs, but not CN.
37. VN reiterated its rights and interest in becoming a full member of the EAHC. VN reaffirmed that all conditions and requirements, as so required to become an MS of EAHC, have been fulfilled. In addition, VN has actively been taking part in many of the IHO and EAHC activities. VN emphasised also that the EAHC is a regional technical organisation on hydrography. Therefore, to be an EAHC Member State would be a fair solution for VN as a coastal state of the region and would enable VN to contribute to and play a more active role in the work of the EAHC as well as the IHO in the future.
38. VN requested the EAHC SC and its members to support VN's accession to the EAHC as a full MS.
39. CN stated that it welcomes any country in the region to make constructive contributions to the EAHC. The EAHC should maintain its technical characteristic. CN suggested that bilateral technical exchanges should be conducted in due time.
40. The Chair noted that, under the current situation, VN cannot join the EAHC or the IHO Council, despite paying contributions to the IHO, and encouraged CN to advance the relevant procedures on this matter.

#### **A6: Maritime Safety Information (MSI)**

##### Report on WWNWS11 and Revision of the Operation Manual of NAVAREA XI Warnings

41. JP, as NAVAREA XI coordinator, reported on the key outcomes of the 11<sup>th</sup> meeting of the WWNWS meeting held in Halifax, Canada, on 26-30 August 2019, and explained the revision of the Operation Manual of NARAEA XI Warnings. The presentation appears as **ANNEX 16**.
42. SG asked about the limitations of Iridium SafetyCast Service. JP explained that the Iridium system is composed of over 60 low-altitude, very-high-speed satellites that relay MSI from NAVAREA coordinators, so if there are any gaps or delays in the information being relayed to ships, it is difficult to identify which satellite is the source of the problem.
43. JP, as the NAVAREA XI coordinator, hoped to continue to deepen the relationship of trust with MSs' national coordinators of MSI to ensure good and smooth coordination with each other and greater safety at sea.

44. The EAHC SC noted the report on WWNWS11 and the revision of the Operation Manual of NAVAREA XI Warning.

Action Item:

AI 4 - MSs to ask national coordinators to coordinate with the NAVAREA XI coordinator and send their comments regarding the Operation Manual.
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## **A7: GEBCO**

### Report on GEBCO Activities

45. The Chair (GEBCO GC), Mr Shin Tani, reported on GEBCO activities. The presentation appears as **ANNEX 17**.

46. The Chair (CHC) asked what actions can be taken by the EAHC. The Chair (GEBCO GC) explained that it is important for the EAHC and the national hydrographic offices of its MSs to understand the importance of bathymetry and the need to share bathymetric data. There is still not yet full bathymetric coverage in East Asia, and there are many gaps that need to be filled by satellite altimetry. The Chair (CHC) requested that graphical information indicating where the gaps are be submitted to the CHC, to initiate discussions towards eliminating these gaps.

47. The US added that MSs should primarily submit their bathymetric data to the IHO Data Centre for Digital Bathymetry (DCDB), rather than directly to a Regional Data Assembly and Coordination Center (RDACC), which would make it easier for all GEBCO RDACCs to access those data.

48. The EAHC SC noted the report on GEBCO activities.

Action Item:

AI 5 - GEBCO GC to submit graphical information indicating the bathymetric gaps in East Asia to CHC.
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### Seabed 2030 Activities

49. The Head of the Seabed 2030 South and West Pacific Ocean Regional Center (SaWPac), Mr Kevin Mackay, reported on Seabed 2030 activities. The presentation appears as **ANNEX 18**.

50. The Chair (EAHC) recalled that all MSs should have received a letter from the DCDB Chair requesting that they provide crowdsourced bathymetric data to contribute to Seabed 2030. The IHO Director added that the letter is available on the IHO website.

51. The EAHC SC noted the report on Seabed 2030 activities.
52. The IHO Director gave a presentation on the IHO Crowdsourced Bathymetry Initiative. He emphasized that crowdsourced bathymetry is the collection of depth measurements from vessels, using standard navigation equipment, while engaged in routine maritime operations, and is not a concerted survey effort. Therefore, it should produce valuable data at no cost to the public sector. The presentation appears as **ANNEX 19**.
53. The US added that most vessels have echosounders and are using them regularly. The question being asked of hydrographic offices is whether or not they wish to be involved with and able to access the data generated from this.
54. PH pointed out that the main concern expressed by private companies is over the price of echosounders. The US explained that the idea of crowdsourced bathymetry is to be of no cost. It would be unrealistic to try to get all vessels equipped with echosounders and to participate in this initiative. Nevertheless, if even some are able to take part, it would provide access to much more data than was previously possible.
55. The EAHC SC noted the presentation on the Crowdsourced Bathymetry Initiative.

Action Item:

AI 6 - MSs and non-MSs to indicate their willingness to participate in the Crowdsourced Bathymetry Initiative, with MSs responding via Annex B CL 11/2019 and non-MSs responding via the EAHC Chair.
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**A8: INTToGIS Project II**

56. The ROK gave a presentation on INTToGIS Project II. The presentation appears as **ANNEX 20**.
57. The ROK emphasised that regional ENC scheme management is a new concept not only for the EAHC but also the IHO. It would contribute to eradicating or minimising geographical overlaps on maps, and also contribute to S-100-related work. Although the implementation of such management involves significant challenges and solutions are not immediately obvious, it is important to nevertheless initiate discussions towards potential future solutions.
58. The EAHC SC noted the presentation on INTToGIS Project II.

Action Item:



AI 7 - The CHC to initiate discussions regarding the implementation of regional ENC scheme management.

#### **A9: Colour our World**

59. SG gave a presentation on Colour our World. The presentation appears as **ANNEX 21**. The purpose of the presentation was to increase the awareness that our data is being used for other purposes other than navigation. Therefore, we need to create flexibility in our data structure and future applications so that a wider audience could benefit from it.
60. The EAHC SC noted the presentation on Colour our World.

#### **A10: TSS (Traffic Separation Scheme) in Sunda Straits and Lombok Straits**

61. ID provided an update on efforts related to the traffic separation scheme (TSS) in the Sunda Straits and Lombok Straits, which will enter into effect on 1 July 2020. The presentation appears as **ANNEX 22**.
62. The Chair (IHO HSCC) commended the TSS as a good example of the transition to S-100.
63. MY suggested that ID may need to establish new TSSs in response to changes in traffic patterns resulting from the move of ID's capital from Jakarta to East Kalimantan. ID replied that it is already in the process of conducting such work.
64. The EAHC SC noted the update on efforts related to the TSS in the Sunda Straits and Lombok Straits.
65. ID gave a presentation on the eventual implementation of S-101 Malacca and Singapore Straits (MSS) ENC. The presentation appears as **ANNEX 23**.
66. The Chair (IHO HSCC) explained that the IHO is working on harmonizing product specifications in preparation for S-101 implementation, which is planned for the end of 2022. He also explained that another issue is ensuring not only convertibility from S-57 to S-101 but also backward compatibility from S-101 to S-57.
67. The US suggested that during the transition period, S-57 charts could be converted into S-101 charts could that would be imperfect but would at least be as good as the S-57 charts they were made from. In the other direction, full S-101 charts could be backward converted to S-57 charts that would also be imperfect but at least useful.
68. The US added that one of the challenges for producer countries is that, during

the transition period, they would need to commit to two production lines, one for S-57 and S-101, which places extra cost on these countries. The US suggested that, although producer countries cannot determine when the transition period will end, they can incentivize users to accelerate their transition to S-101, by passing on the costs of maintaining two production lines to the price of the S-57 charts.

69. The EAHC SC noted the presentation on the eventual implementation of S-101 MSS ENC.
70. The Vice-Chair of the IHO S-100 WG, presented conversion case studies in relation to the transition to S-100. The presentation appears as **Annex 24**.
71. The EAHC SC noted the presentation on the conversion case studies in relation to the transition to S-100.

#### **A11: Concept of EAHC 50<sup>th</sup> Year Celebration**

72. JP, as the Permanent Secretariat, provided an update on proposals and preparations for the EAHC 50<sup>th</sup> Year Celebration. The presentation appears as **ANNEX 25**.
73. SG suggested that the EAHC should issue a joint press release on the occasion of the 50<sup>th</sup> Year Celebration.
74. Regarding BN's proposal to produce a short video, ID offered to coordinate the video creation efforts and the ROK offered to provide technical support.
75. MY suggested that countries should start promoting the 50<sup>th</sup> anniversary of the EAHC at the national level in advance of the actual anniversary, for example from the end of 2020.
76. Regarding its proposal to publish a book to commemorate the 50<sup>th</sup> anniversary of the EAHC, the ROK explained that it is very important to preserve the history and institutional knowledge of EAHC in some physical form. MY suggested that it could print the book, in accordance with the content provided by the EAHC.
77. The EAHC SC noted the update on proposals and preparations for the EAHC 50<sup>th</sup> Year Celebration.

#### Action Item:

AI 8 - JP to submit a proposal, with the help of SG, for issuing a joint press release on the occasion of the EAHC 50<sup>th</sup> Year Celebration.

AI 9 - ID to coordinate the video creation efforts and the ROK to provide technical support.

AI 10 -MY to print the publication to commemorate the 50th anniversary of the EAHC, in accordance with the contents produced by the EAHC.

## **A12: Strategic Team Advance Roadmap (STAR)**

### CTD Trend Study

78. SG presented the results of the CTD Trend Study. The presentation appears as **ANNEX 26**.

79. The EAHC SC noted the presentation on the results of the CTD Trend Study.

### Task Group Report

80. The Chair of the STAR TG, reported on the STAR TG activities. The presentation appears as **ANNEX 27**.

81. The EAHC SC noted the STAR TG report and requested the continued support of the MSs for the work of the STAR TG.

## **A13: Preparation for the 2<sup>nd</sup> IHO Assembly**

82. The IHO Director reminded MSs to respond to Assembly Circular Letter No. 8 on the Preparation of the Table of Tonnages by 10 February 2020.

### Action Item:

AI 11 -MSs who have not yet done so to respond to Assembly Circular Letter No. 8 on the Preparation of the Table of Tonnages by 10 February 2020.

### Selection of IHO Council members

83. The Chair (EAHC) recalled the procedure for the selection of IHO Council members from the EAHC as agreed to at the 3<sup>rd</sup> EAHC SC meeting in 2016.

84. MY wished to cede its seat on the IHO Council back to the EAHC SC and expressed honour to have held the position.

85. The EAHC SC thanked Rear Admiral Dato' Hanafiah bin Hassan for his insight and leadership thus far as a representative of MY and the EAHC on the IHO Council.

86. The EAHC SC nominated TH to serve as a new IHO Council member from the EAHC and wished TH every success.

87. TH expressed its gratitude to all MSs for their support. TH appreciated this great opportunity and promised to do its best on behalf of the region.

Decision:

D 6 - The EAHC SC confirmed that ID will serve as the IHO Council member from the EAHC, as the Vice Chair of the EAHC.

D 7 - The EAHC SC unanimously selected TH to serve as the IHO Council member from the EAHC.

88. The IHO Director commended the EAHC SC for its pragmatic process for selecting IHO Council members. At the same time, he suggested that the EAHC SC take the opportunity presented by the ongoing review of the EAHC statutes to also consider reviewing its selection process, taking into consideration the practices of other regional hydrographic commissions. In particular, he suggested that the EAHC consider making its selection from all IHO members in the region, not only those that are MSs of the EAHC.

Future of the IHO

89. MY questioned the appropriateness of tonnage as a measure of hydrographic interest, pointing out that many EAHC MSs contribute to the IHO and hydrography in ways other than tonnage, such as the production and distribution of ENC's, and expressing concern that EAHC MSs may lose their places on the IHO Council in future if hydrographic interest continues to be measured by tonnage.

90. The IHO Director explained that all IHO MSs can attend IHO Council meetings and make their voices heard, even as observers. The IHO continues to need to make itself attractive to countries that are not yet IHO members. When new members join the IHO, some existing members may be displaced from the IHO Council. However, these existing members should not feel threatened or that their interests have been compromised.

91. SG added that all IHO members, even if they are not members of the IHO Council, can make proposals at the level of the IHO Assembly, which is the highest decision-making body of the IHO.

92. ID pointed out that although the EAHC makes significant contributions to the IHO, including through its capacity-building activities, it seems to be at a disadvantage when applying for funding for its capacity-building and other activities.

93. The IHO Director acknowledged that IHO funds are limited. At the same time, he recognized the good work done by the EAHC, especially its very active and self-funded capacity-building efforts. He suggested that the EAHC is in a very good position to advertise this good work to the IHO and make an

argument for more funding based on the great impact the EAHC is already making through its own efforts. The EAHC could perhaps even export its activities to other regional hydrographic commissions. However, it is up to the EAHC to promote itself and make such an argument.

#### **A14: Any Other Business**

94. The EAHC SC noted that this would be the last meeting attended by Mr Yong Baek of the ROK. The EAHC SC thanked him for his hard work and great contributions, and wished him every success in his new position at the IHO.

95. The ROK proposed to host a self-funded S-100 training course in 2020.

Action Item:

AI 12 -The ROK to host a self-funded S-100 training course in 2020 and to circulate a document to MSs regarding their attendance.
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#### **A15: Date and Venue for Next Meeting**

96. With regard to the date and venue for the next SC meeting, the ROK suggested that TH host the meeting as 2021 marks the 100<sup>th</sup> anniversary of the establishment of TH's Hydrography Department.

97. TH agreed to the suggestion and proposed holding the meeting at a similar timing in 2021.

98. The ROK indicated its willingness to host an SC meeting and a TRDC-BOD meeting in the future.

Decision:

D 8 - The EAHC SC agreed that TH will host the next SC meeting at a similar timing in 2021.
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99. The Chair (EAHC) recalled IHO Circular Letter 36/2018 regarding the Implementation of the IHO Work Programme and Request for Member States to Consider Hosting Meetings.

#### **A16: Outcome of the Meeting**

100. The Chair suggested that the EAHC SC focus on reviewing the list of decisions and actions, as the important outcomes of the meeting.

101.The EAHC SC reviewed and revised the draft list of actions and decisions, which appears as **Annex 28**.

**A17: Close of Meeting**

102.The Chair of the EAHC thanked the participants for their fruitful and proactive discussions, and promised that Japan will continue to do its best as the Chair and the Secretariat to contribute to the enhancement of the EAHC. The meeting was then closed.

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Prepared by

Secretariat  
EAHC Chair's Office