

The logo features the word "AEISS" in blue with a grey swoosh above it, followed by "VISION" in black. Below this, the year "2020" is written in large, bold, black digits.

**AEISS VISION
2020**

AEISS Membership in China – A Strategic Outlook

Xiaopeng Yang

**September 28-29, 2018
Rome Park Hotel, Rome, Italy**

Outline

- Current status of AESS in China
- Improve Influence of AESS in China
- Increase Chinese Membership
- My Personal Role
- Strategic Plan

Current status of AESS in China

- Number of Chinese AESS member is **small**
 - **130** Chinese members at July 2018
 - **2.8%** in AESS member (4615 AESS member)
 - **0.8%** in IEEE Chinese member (over 15,000 Chinese IEEE member)
 - **None** of Chinese AESS fellow (over 140 Chinese IEEE fellow)
 - **None** of Chinese received AESS awards

- Here, all the figures are only accounted in Mainland China

Current status of AESS in China

- Number of local AESS chapter or section is **small**
 - **Only one chapter** in whole China (AESS Beijing chapter)
 - No activity organized by Beijing chapter (At least I don't know)
 - **None** of student sections

But IEEE China council has 8 local branches and over 40 student sections, and over 67 technical society chapters

Current status of AESS in China

- Number of conferences sponsored by AESS is **small**
 - Technical co-sponsor to IET International Radar Conference 2018
 - October 16-19, Nanjing, China
 - Organized by IET, BIT, Radar society of CIE
 - Hold every two years
 - Sponsor to International Conference on Radar of 5 nation circle
 - Hold every five years
 - **Fewer attendees from overseas, more less from USA**

But IEEE sponsors over 100 international conferences per year in China



IET International Radar Conference 2018



Conference city: Nanjing, China



October 16-19, 2018

Distance to Nanjing

1000 km from **Beijing**

300 km from **Shanghai**

1400 km form **Hong Kong**



IET International Radar Conference 2018



Conference city: Nanjing, China

Birthplace of radar research in China



- ◆ Over 7000 years history of civilization
- ◆ Over 2500 years city history
- ◆ Ancient capital of six Dynasties
- ◆ A beautiful city



IET International Radar Conference 2018



Conference venue

Hilton Nanjing Riverside Hotel



Address: No.1 Huabin Road, Gulou District, Nanjing,21001,China

Current status of AESS in China

- Influence of AESS technical Journals is **not high**
 - Chinese Scholars do not like to submit paper
 - Review and publish period of TAES are too long
 - Number of papers in AES Magazine is small
 - Impact Factors of TAES and AES Magazine are not high
- IEEE TSP, TAP, TGRS, TCOM, SP Magazine, ect. are well recognized in China, which are listed as the top Journals in most of Chinese Universities.
- In BIT, publishing one paper on top Journals is satisfied on the minimum condition to apply for PhD.
- But three papers on IEEE TAES is required as the minimum condition.

Current status of AESS in China

- Attending overseas radar conference is still **not easy**
 - The reject rate of Chinese scholar's papers is still high
 - Reason is complex (English, quality, others)
 - No review comments for some rejected paper
 - Visa issue
 - Some researcher can not get visa, especially the senior researcher

Current status of AESS in China

- Influence of AESS in China is **not high**
 - Less activities organized by AESS
 - Don't know the activities organized by AESS
 - AESS is not well known in China
 - Some Chinese industry researchers don't know
 - Interactions between AESS and IEEE China are not many
- But **China is huge**, we can not ignore it
 - 2,879 Universities (accounted in March 2018)
 - over 37 million college students (accounted in April 2018)
 - over 9 million graduated student per year

Outline

- Current status of AESS in China
- Improve Influence of AESS in China
- Increase Chinese Membership
- My Personal Role
- Strategic Plan

Improve Influence of AESS in China

- Increase technical communication activities in China
 - Avoiding sensitive research, special application and background
 - Civilian radar, new technology, human wellbeing related topic, etc.
 - Extend the area from radar to all other research direction of AESS
 - Such as Fusion, Digital Avionics, Instrumentation Measurements, and Navigation
 - Education and skill training
 - Student education and summer school, etc.
 - Invite famous expert to give lecture in China
 - Using IEEE distinguished lecture program
 - Supported by our own research project

Improve Influence of AESS in China

- Involve more effectively into conference hold in China
 - Sponsor or Technical co-sponsor conferences hold in China
 - Involve more effectively into national Radar conference of China
 - Send representative to attend conference
 - Give talks for national Radar conference
 - Give more guidance for international conference submission to attractive more attendees from China
 - Give more review comments on Chinese submission, including the technical and English corrections
 - Especially student submission

Improve Influence of AESS in China

- Increase interactions with Chinese technical organizations
 - IEEE China
 - China Association for Science and Technology
 - Chinese Institute of Electronics (CIE) (including 46 technical societies)
 - China Radar Industry Association
 - Radar Society of CIE
 - Signal Processing Society of CIE
 - Beijing Institute of Electronics (BIE)

Improve Influence of AESS in China

- Establish more local chapters



- Establish two more chapter?

- Beijing chapter
- Shanghai chapter
- Xi'an chapter

- In the following?

- Chengdu chapter
- Harbin chapter
- Student section in Universities

- Requirement to chapters

- Chapter Committee
- Organize activity
- Give annual report to AESS
- Increase membership

Improve Influence of AESS in China

- Attract high level Chinese researchers to involve AESS activity
 - Improve number of Chinese IEEE fellow
 - Encourage more Chinese senior member
 - Invite high level Chinese researchers to give a plenary talk or invited talk in conference
 - Invite some professors to give the oral presentation in conference
 - Usually Chinese professor takes some students together to attend
 - Now Chinese University has funding to support international travel

Improve Influence of AESS in China

- Enrich AESS awards
 - Invite more Chinese to apply for AESS awards, it will cause more attention from China
 - Invite Chinese student to apply for the PhD thesis award
 - **Language Issue?**
 - Ask Chinese student to summarize the thesis in 10 pages English version, which will be helpful for the review
 - Encourage Chinese student to apply for the conference paper award
 - Establish the student conference travel award

Improve Influence of AESS in China

- Improve the recognition of AESS Journals
 - reduce the review period and improve the impactor factor of TAES
 - Establish a new Journal to accelerate period to publish
 - For example, IEEE Radar Technology Letter?
 - Publish new achievement or hot topic to IEEE AES Magazine or IEEE News Letter
 - For example, quantum radar research in Nanjing
 - Invite some high level Chinese researchers to submit papers
 - Send AESS news in Chinese to Chinese researchers

Outline

- Current status of AESS in China
- Improve Influence of AESS in China
- Increase Chinese Membership
- My Personal Role
- Strategic Plan

Increase Chinese Membership

- Introduce benefit of membership in AESS Journals or email news periodically, including the email news in Chinese
- Establish some connection with related University and Industry to encourage to apply for member
 - Encourage professor to apply, and then ask him to encourage his students to apply
 - Encourage the group leader of industry to apply, and then ask him to encourage his group member to apply

We should develop more member from Chinese industry, not many **AESS members are from Chinese industry**

Many large research institute in China, such as

Increase Chinese Membership

- Especially pay attention to encourage the student member
- Perhaps student member will become regular member after graduation
- It is necessary to establish student sections, especially high level Universities
 - Such as BIT, Xidian U, UESTC, Tsinghua U, Beihang U, HIT

Increase Chinese Membership

- Ask chair of local chapter to increase member
 - Increase 30 new members each chapter each year?
 - Set this as qualified target to chapter chair
 - If failed, give a warning
 - If failed continuously, change the chapter chair
 - Establish more local chapters, because China is large
- Ask leader of student section to increase member
 - Increase 15 new members each section each year?

Increase Chinese Membership

- Membership fee discount program
 - For the student member
 - Free for first year membership (new member)
 - Half rate for second year membership
 - Regular rate from the third year
 - For regular member
 - Half rate for first year membership (new member)
 - Regular rate from the second year
 - Randomly select 20 student membership fee free each year

Increase Chinese Membership

- When submit paper to AESS conferences and Journals
 - Give the AESS member special discount
 - Now conference discount for IEEE member, we could set AESS member discount for AESS sponsored conference
 - Journal paper charge discount
 - For none of member, set the option to apply for AESS membership in the submission system , then give member special discount immediately

Increase Chinese Membership

- The applicant of IEEE fellow from AESS must be AESS member
- AESS award candidate must be AESS member
 - AESS technical awards
 - PhD thesis award, conference paper award, conference travel award, etc.
 - The recommendation letter must be from AESS member
- AESS member has the priority for registration of AESS activities

Outline

- Current status of AESS in China
- Improve Influence of AESS in China
- Increase Chinese Membership
- My Personal Role
- Strategic Plan

My Personal Role

- Improve connection between AESS and Chinese technical societies or organizations
 - Member of BOG of China Radar Industry Association
 - Standing Committee Member of Radar Society of CIE
 - Deputy General Secretary of Radar Society of CIE
 - Deputy Director of Radar Society of BIE
 - Committee Member of Signal Processing Society of CIE
 - Committee Member of Young Scientists Club of CIE
 - Chair of Signal Proc. and Theory Comm. of Radar Society of CIE
 - Chair of Signal Proc. and System Comm. of Signal Processing Society of CIE

My Personal Role

- Improve effect of AESS based on our organized conference
 - Start to organize a series international conference on SP
 - **IET International Conference on Signal, Information and Data Processing**
 - Organized by IET, BIT and signal processing society of CIE
 - **August 14-16, 2019, Guiyang, China**
 - Hold every two year in China
 - apply for technical co-sponsore of AESS

Guiyang



My Personal Role

- Improve effect of AESS based on our organized conference
 - IET International Radar Conference
 - Technical co sponsored by AESS
 - Next will be hold in **Xiamen**, China
 - **November 4-6, 2020** (every two year in China)

Xiamen



My Personal Role

- Improve effect of AESS based on our organized conference
 - National Radar conference of China
 - Every two year in China
 - Over 680 submissions and 540 accepted paper and more than 700 attendees in 2017
- Give AESS a exhibition booth in these conferences
- Set a special registration discount for AESS membership
- Distribute AESS material to the attendees
- Introduce AESS in a suitable way, especially how to apply for the AESS membership

My Personal Role

- My research group can give some contribution to AESS
 - Radar Research Laboratory
 - 35 faculty, 5 post Doc, 60 PhD and 150 Master students
 - The largest radar research group in Chinese University level
 - We have some projects to support international collaborations
 - The Program of Introducing Talents to Universities (111 Project)
 - National key project of NSFC for international collaborations

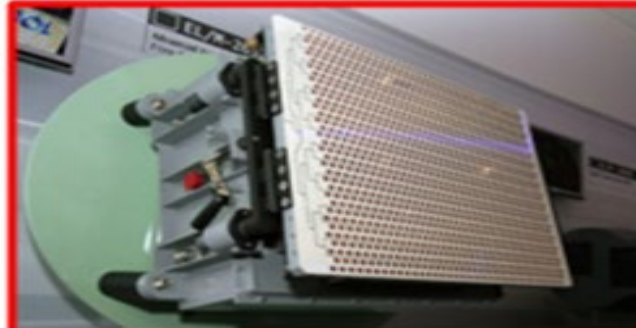
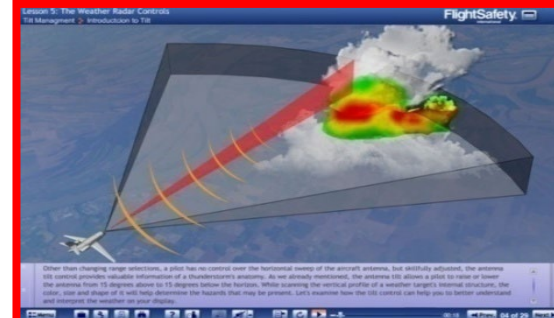


The Program of Introducing Talents to Universities (111 Project):

- Approved by The Ministry of Education and The Foreign Expert Bureau of China
- Supporting our teachers and foreign experts for international communications
- Funding: 1.5 Million USD (5 years)
 - Introducing more than 1000 top world-class scholars
 - From top 100 world's universities or research institutes
 - Establish 100 world-class intelligence bases in China

Research field:

- Radar System
- Signal and Information Processing
- Microwave and Microelectronics
- Communication in Netted Radar System



My Personal Role

- We have good connection with overseas Universities
 - I spent 5.5 years in Japan and 2 years in Syracuse, USA
 - We have international students from Asian, Europe and Africa
 - We invite more than 40 international experts and professors to give lectures or talks in BIT every year

These will be helpful to improve the influence of AESS and increase membership

Outline

- Current status of AESS in China
- Improve Influence of AESS in China
- Increase Chinese Membership
- My Personal Role
- Strategic Plan

Strategic Plan

- Short term (2018)
 - Introduce about 30 new Chinese members
 - Encourage faculty and students from our group
 - Encourage faculty and students from other Chinese Universities

- Middle term (2019-2021)
 - Establish new local chapter and student section
 - Ask local chapter and student section to introduce new member
 - Using our international conferences to improve the influence of AESS
 - Using my position in Chinese technical societies to improve the influence of AESS

Strategic Plan

- Long term (beyond 2022)
 - Improve the effect of AESS in China based on the mentioned method
 - Make AESS very known in China
 - Make AESS member to increase self-motivated or applied by themselves

Thanks for your attention!