

SS1: European Forum of Astronomical Communities in New Member States Prague June 28th 2017

Aims of the

European Forum of Astronomical Communities

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in collaboration with

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- Long-term activity where representatives of various national communities discuss progress, intentions and plans;
- Milestones: Annual Forum Sessions @ Future EWASS Assemblies;
 - Starting point: ASTRONET D3-1, D3-2, D3-3



Statistics Size of the Community

Country	Population (millions)	Number of astronomers1	Number of IAU members	Astronomers per million inhabitants	IAU members per million inhabitants
Bulgaria	7,3	101	67	14	9
Croatia	4,3	38	25	7	6
Estonia	1,3	40	33	31	25
Greece	10.9	72	123	7	11
Hungary	9,9	85	72	9	7
Latvia	2,0	50	16	25	8
Lithuania	3,0	40	21	13	7
Romania	20,1	115	33	6	2
Serbia	7,2	70	51	10	7
Slovakia	5,4	63	46	11	9

Statistics Annual Spending on Astronomy

Country	Number of astronomers	Average annual salary (EUR)	Annual Spending on astronomy (kEUR) ¹⁾
Bulgaria	101	4 668	1 414
Croatia	38	12 113	1 381
Estonia	40	10 368	1 244
Greece	72	18 000	5 600
Hungary	85	10 467	2 669
Latvia	50	8 923	1 338
Lithuania	40	7 425	891
Romania	115	6 146	2 120
Serbia	70		
Slovakia	63	11 224	2 121

1) Annual Spending on Astronomy = 3 x Number of Astronomers x Average Annual Salary

Statistics Potential Contribution to ESO

Country	Weighted NNI ² average 2010-12 (billions of EUR) ³⁾	Calculated share 2014 (%) ⁴⁾	Calculated annual contribution 2014 (MEUR) ⁵⁾	E-ELT Special contribution (MEUR) ⁶⁾	Special contribution for accession 1 January 2015 (MEUR) ⁷⁾
Bulgaria	30,8	0,30	0,5	0,6	3,4
Croatia	32,7	0,31	0,5	0,6	3,6
Estonia	14,2	0,14	0,2	0,3	1,6
Greece	184	1.8	2.8	3.5	20.5
Hungary	59,8	0,58	0,9	1,1	6,6
Latvia	17,7	0,17	0,3	0,3	2,0
Lithuania	26,8	0,26	0,4	0,5	3,0
Romania	111,4	1,07	1,7	2,1	12,4
Serbia	24,0	0,23	0,4	0,5	2,7
Slovakia	53,5	0,51	0,8	1,0	5,9

2) NNI:Net National Income.

3) NNI figures are estimated on NNI/GDP for countries where no OECD NNI data are available.

4) Percentage share is based on100% for the 15 ESO Member States in the EU.

5) Including 2% E-ELT increase.

6) Calculated share in E-ELT special contribution based on amount due 31.12.2014.

7) Planned value of ESO net assets without non-current (long term) liabilities is basis for calculation of accession fees.



- Front-line facilities at all wavebands;
- Large international teams ignoring borders;
- Large high-quality data sets available to all with good internet access;
 - Virtual Observatory tools;
 - Roadmap of Infrastructures.



Coordination with National Funding Agencies; Vision for local facilities: equipment upgrades, standard instruments, networking, coordination, complementary data, education, outreach;

Consortia on renovation of existing facilities at ESO La Silla Observatory and elsewhere;

Personnel for ESO and ESA, in-kind partnership.



Topics for the Discussion: Pan European Networks of Mentors for MSc and PhD Students

- EAS in collaboration with ASTRONET will establish a network of contacts to experienced mentors;
- Mentoring @ low cost using electronic communication;
 - Female students @ male-dominated departments



Topics for the Discussion: Exchange Visits for MSc and PhD Students

- Experience with front-line research and instrumentation;
- A few months working with experienced colleague;
- National programmes for collaboration with ESO and ESA;
- Return programmes using national and other resources;
- H2020 programmes ASTERICS, OPTICON, RADIONET.



Topics for the Discussion: Writing Schools

Cooperation with A&A;

Preparation together with EAS & ASTRONET;

First paper is essential.



Topics for the Discussion: Virtual Observatories

Access to archives;

How to work with the big data;

Reasonable IT equipment.



Topics for the Discussion: National Telescopes: Pros. & Cons.

Used by the local community +

Easy access: ESO does not accommodate all reasonable projects;

Long term dedicated programs;

Local archives;

Modest astroclimate;

Funding problems;

Need of special instrumentation.



Topics for the Discussion: National Telescopes: Way Forward I

- Communities with similar interests: how to find the most effective connections?
- Pool resources of funding providers towards a common project?
- Joint programs between partners in small and big countries?
- Support big pan-European projects, like space missions, from national resources?
 - More cooperation between small countries and with big projects?
 - Building joint instruments;
 - Use the infrastructure of ESO La Silla Observatory;
 - Put the medium-size telescopes to ESO La Silla.



Topics for the Discussion: National Telescopes: Way Forward II

- Building joint instruments for small national telescopes in Europe?
- Improve the exploitation of existing telescopes in Europe?
- Use the infrastructure of ESO La Silla Observatory via agreements with ESO?
 - Move the medium-size telescopes to ESO La Silla?
- Construct new small telescopes on La Silla or elsewhere?