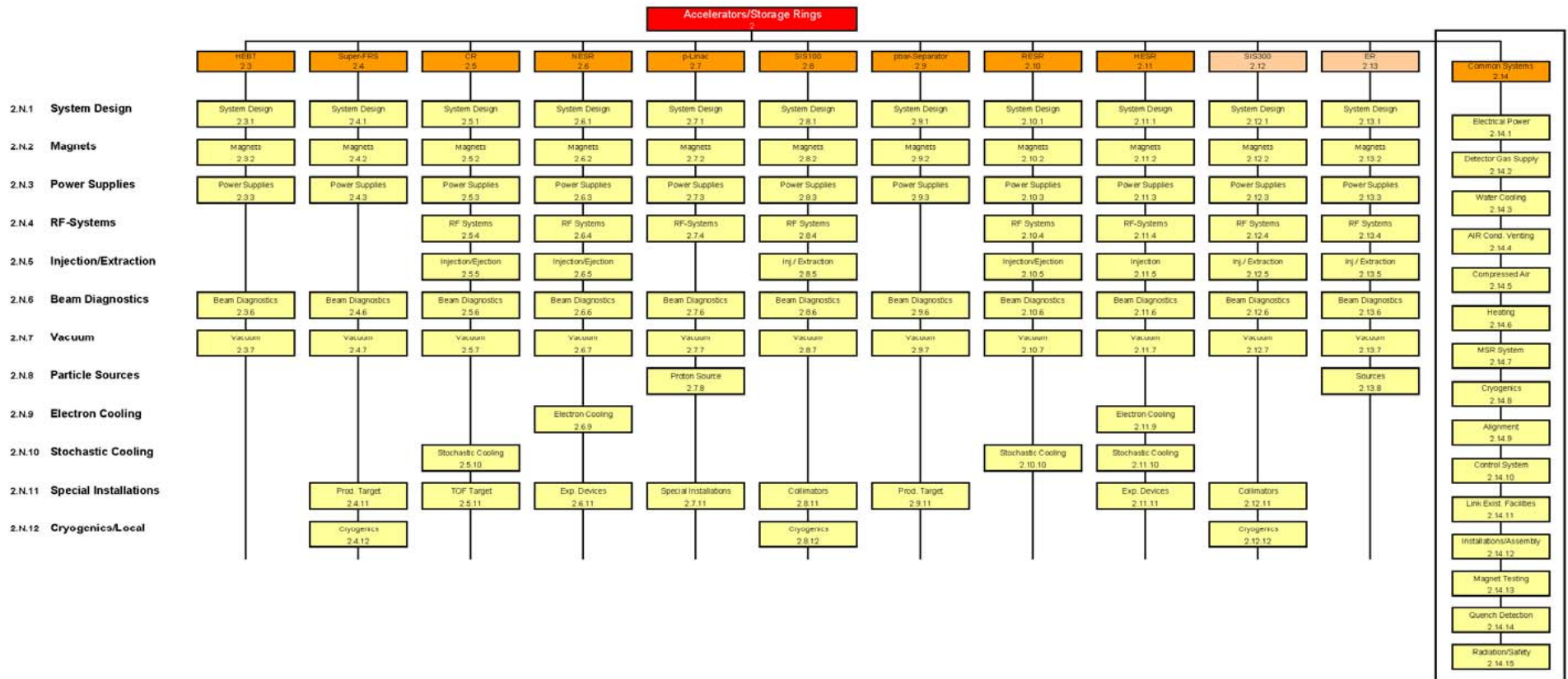
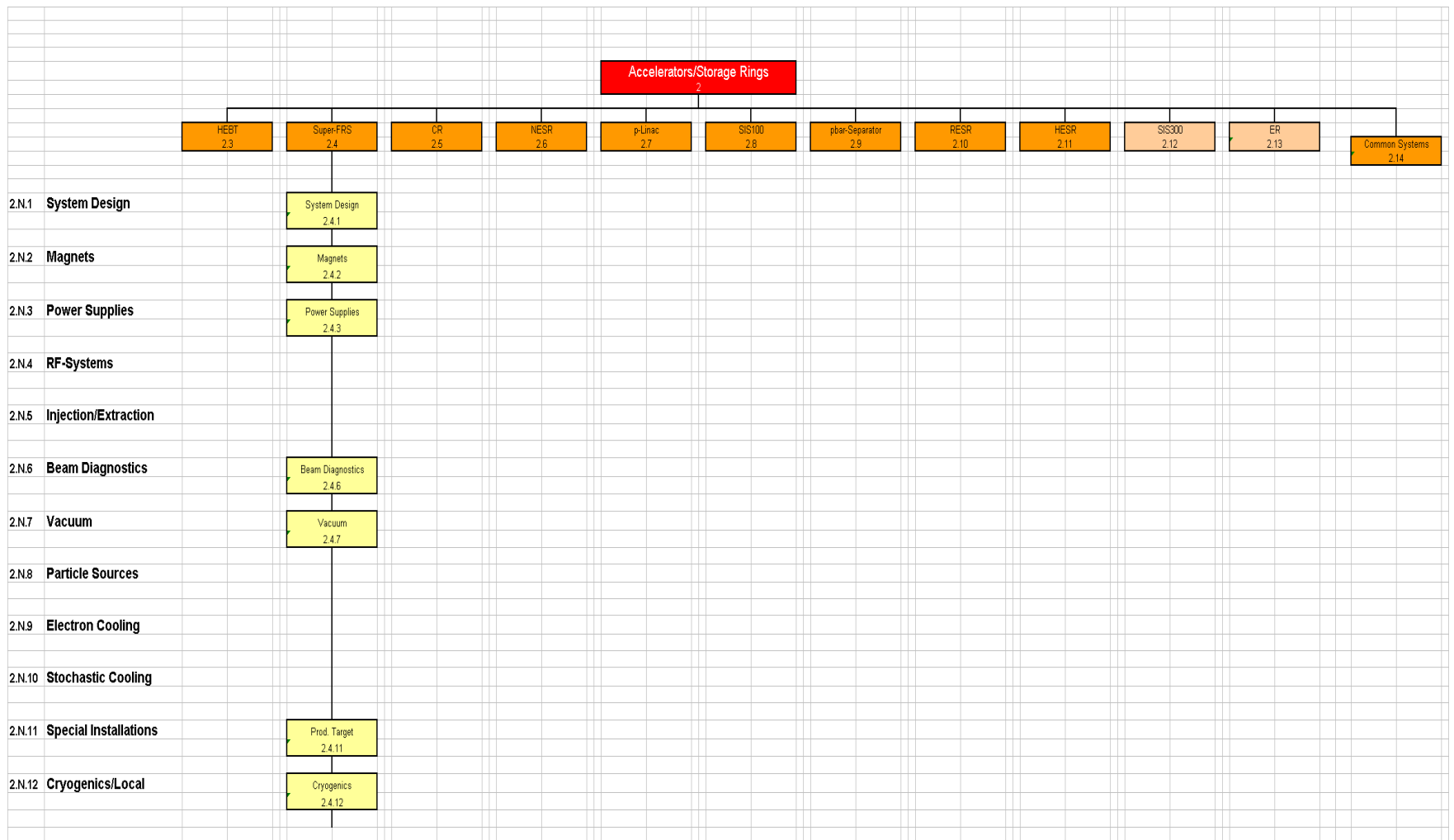


# FAIR Project Status of Eols

## Status of the FAIR Project In Kind Contributions for Super FRS



# FAIR Project Status of Eols



# FAIR Project Status of Eols

Super-FRS  
2.4

Dipoles  
2.4.2.1

Quadrupoles  
2.4.2.2

Sextu/Octupoles  
2.4.2.3

other  
2.4.2.4/5

Power Supplies  
2.4.3

Beam Diagnostics  
2.4.6

Vacuum  
2.4.7

Beam Catcher  
2.4.11.1

Degrad./Ion-Catch  
2.4.11.2

Production Target  
2.4.11.3

Local Cryo  
2.4.12

*France has orally expressed interest but not yet specified*

5 Budker (Dip 1) / 1 VECC (LEB)

14 IMP (Dipoles 2 and 3)

5 Bud. (Q 1/2)      1 VECC (LEB)

11 CIEMAT (Types 3 and 4)

5 Bud. (Sex 1) / 1 VECC (LEB)

11 CIEMAT (Sext. Type 2)

11 CIEMAT

Interfaces by 13 GSI,  
about 10% of value

Interfaces by 13 GSI,  
about 10% of value

14 IMP, chambers dip 2/3  
13 GSI V,G,Boc,NEGch  
5 Budker

1 VECC  
2 Profex (iron plugs)

2 Profex (degtader plates)

13 GSI

15 Wroclaw Univ. Technol.

**Installation Date: Oktober 2012**



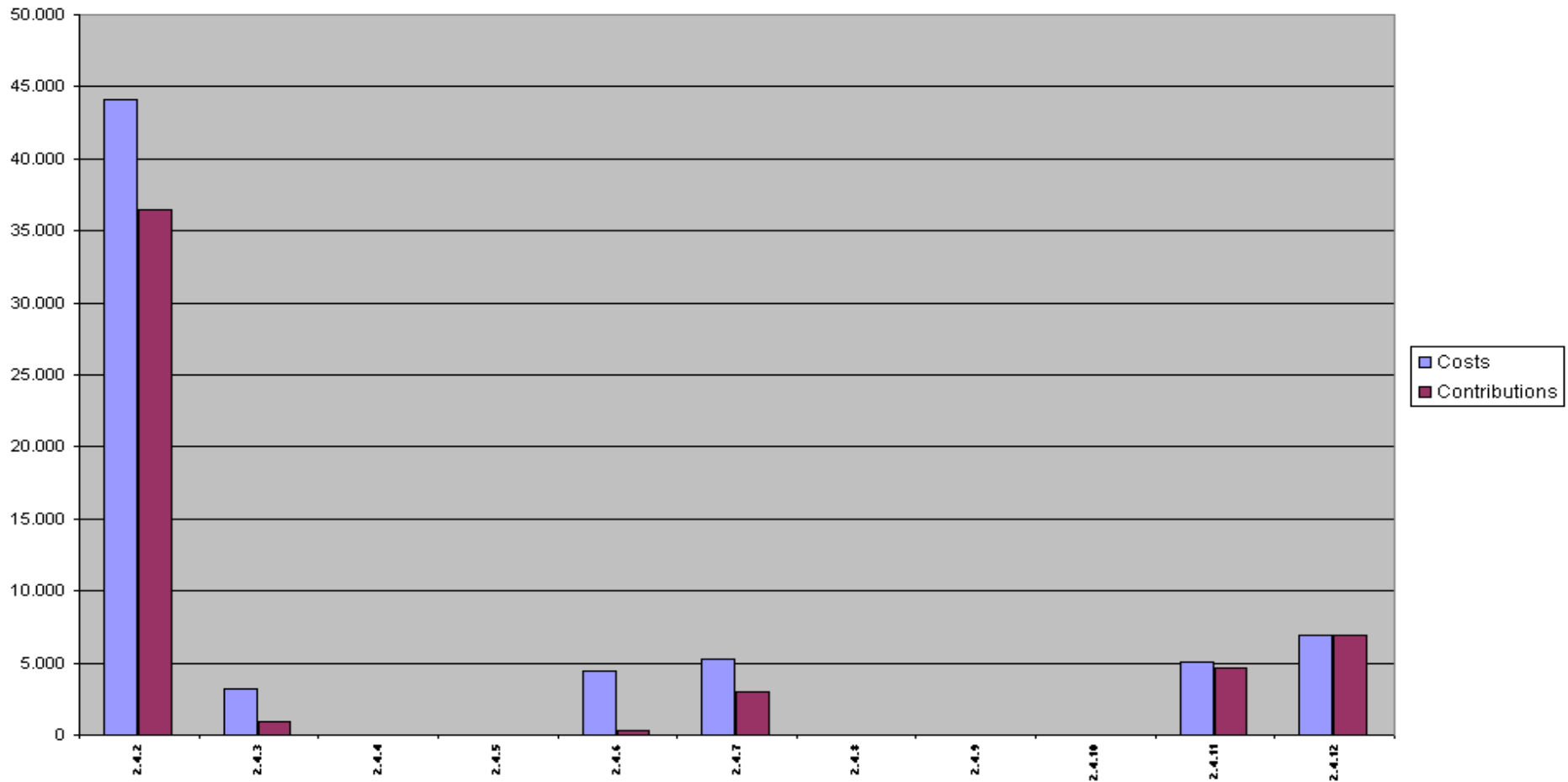
# FAIR Project

## Status of Eols

2.4		Super FRS									
	Technik System	Costs [k€]	Eols[k€]	Rest [k€]	PSP-True	PSP-False	Relative	Institute	Country	Remarks	
✓	2.4.2 Magnets	44.152	36.499								
		2.880	2.880		2.4.2.1.4		100,0%	VECC	India		
		1.257	1.257		2.4.2.2.7		100,0%	VECC	India		
		1.744	1.744		2.4.2.2.8		100,0%	VECC	India		
		641	641		2.4.2.3.3		100,0%	VECC	India		
		3.078	3.078		2.4.2.1.1		100,0%	BINP	Russia		
		496	496		2.4.2.2.1		100,0%	BINP	Russia		
		744	744		2.4.2.2.2		100,0%	BINP	Russia		
		137	137		2.4.2.3.1		100,0%	BINP	Russia		
		7.858	7.858		2.4.2.2.3		100,0%	CIEMAT	Spain		
		7.936	7.936		2.4.2.2.4		100,0%	CIEMAT	Spain		
		873	873		2.4.2.2.5		100,0%	CIEMAT	Spain		
		378	378		2.4.2.2.6		100,0%	CIEMAT	Spain		
		6.041	6.041		2.4.2.3.2		100,0%	CIEMAT	Spain		
		904	904		2.4.2.3.5		100,0%	CIEMAT	Spain		
		100	100		2.4.2.3.6		100,0%	CIEMAT	Spain		
		342	342		2.4.2.4		100,0%	CIEMAT	Spain		
		398	0			2.4.2.5	0,0%				
		1.090	1.090		2.4.2.1.2		100,0%	IMP	China		
		7.256					0,0%				
				7.653			82,7%				
✓	2.4.3 Power Converters	3.189	947		2.4.3.*.2	2.4.3.*		GSI	Germany		
					2.4.3.*.3		29,7%	GSI	Germany		
				2.242							
✓	2.4.4 RF Systems	0	0								
✓	2.4.5 Injection / Extraction	0	0								
✓	2.4.6 Beam Diagnostics	4.458	356		2.4.6.*		8,0%	GSI	Germany		
				4.102							
✓	2.4.7 Vacuum	5.312	2.977								
			321		2.4.7.1.2			IMP	China		
			1.062		2.4.7.*			GSI	Germany	20% Vacuum costs	
			1.594					BINP	Russia	30% Vacuum cost ???	
				2.335			56,0%				
✓	2.4.8 Particle Sources	0	0	0							
✓	2.4.9 Electron Cooling	0	0	0							
✓	2.4.10 Stochastic Cooling	0	0	0							
✓	2.4.11 Insertions / Collimators	5.098	4.647								
			768		2.4.11.1			VECC	India		
			11		2.4.11.1.7			Profex Consult	Romania		
			66		2.4.11.2.1	2.4.11.2		Profex Consult	Romania		
			68		2.4.11.2.2			Profex Consult	Romania		
			3.734		2.4.11.3			GSI	Germany		
				451			91,1%				
✓	2.4.12 Cryogenics (local)	6.917	6.917	0	2.4.12		100,0%	WUT	Poland		
	Sum	69.126	52.342	16.784							
	Relative		75,7%								
	German Part		6.099,4								

# FAIR Project Status of Eols

Eol for Super FRS



# FAIR Project Status of Eols

## Summary of Eol on Accelerators vs. FAIR Partner Country and vs. Subprojects

According to Technical Meetings April 2008/ W.Jacoby 29.05.2008

Update according to Cost Book Version 5/W. Jacoby 11.09.2008

	Subproject										Countries Sum
Country	HEBT	S-FRS	CR	NESR	p-LINAC	SIS100	pBar TARGET	RESR	HESR	COMM SYST	
<b>Costbook value</b>	<b>46.418</b>	<b>69.126</b>	<b>33.519</b>	<b>23.815</b>	<b>13.222</b>	<b>74.604</b>	<b>6.006</b>	<b>18.444</b>	<b>44.576</b>	<b>100.265</b>	<b>429.995</b>
Austria											0
China		1.411	3.907								5.318
Finland											0
France					821						821
Germany	6.110	6.099	10.232	1.782	12.401	25.140	551	4.343	44.576	100.265	211.499
Great Britain											0
Greece											0
India		7.290			13.322						20.612
Italy											0
Poland		6.917				8.135					15.052
Romania	389	145				853					1.387
Russia	22.282	6.049	15.893	9.286	205	22.661		1.091			77.467
Slovenia											0
Spain		24.432									24.432
Sweden											0
<b>Absolute</b>	<b>28.781</b>	<b>52.342</b>	<b>30.032</b>	<b>11.068</b>	<b>13.222</b>	<b>56.789</b>	<b>551</b>	<b>5.434</b>	<b>44.576</b>	<b>100.265</b>	<b>356.587</b>
<b>Relative</b>	<b>62,0%</b>	<b>75,7%</b>	<b>89,6%</b>	<b>46,5%</b>	<b>100,0%</b>	<b>76,1%</b>	<b>9,2%</b>	<b>29,5%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>82,9%</b>

