

**Status of Contributions to ATLAS Common Projects  
as of 28 February 2002**

The ATLAS Common Projects are financed by contributions from the Funding Agencies in proportion to their commitments to deliverables to system/sub-detector construction with a minimum cash contribution of 100 kCHF per collaborating institution. The contributions to the Common Projects are calculated, for the purpose of this report, on the basis of the expected total contributions by the Funding Agencies to ATLAS (c.f. Annex 8 of the Memorandum of Understanding, ATLAS RRB-D 98-44 rev.).

Contributions to the ATLAS Common Projects are made either in kind or by cash contributions to the Common Fund, the latter one including the minimal cash contribution.

The attached Table shows the status of the contributions to the Common Projects as of February 28, 2002, including advance cash contributions. It also shows the impact of in-kind allocations proposed for approval by the RRB at its meeting on 23 April, 2002. The in-kind contributions already allocated, as well as the newly proposed ones, are listed by Funding Agency in the Annex.

## Status of Contributions to Common Projects by Funding Agency

(in kCHF)

actual situation on 28/02/2002

new in-kind proposals

| Funding Agency  | actual situation on 28/02/2002 |                  |               |                |                 | new in-kind proposals |                  |                 |                 |
|-----------------|--------------------------------|------------------|---------------|----------------|-----------------|-----------------------|------------------|-----------------|-----------------|
|                 | C.P. obligation                | in-kind contrib. | cash contrib. | m.s. contrib.  | total contrib.  | % of obligation       | in-kind contrib. | total contrib.  | % of obligation |
| Armenia         | 100                            |                  |               | 12.5           | 12.5            | 13%                   |                  | 12.5            | 13%             |
| Australia       | 1100                           | 250              |               | 200.0          | 450.0           | 41%                   |                  | 450.0           | 41%             |
| Austria         | 250                            | 200              |               | 75.0           | 275.0           | 110%                  |                  | 275.0           | 110%            |
| Azerbaijan      | 100                            |                  |               | 34.6           | 34.6            | 35%                   |                  | 34.6            | 35%             |
| Belarus         | 200                            |                  |               | 26.3           | 26.3            | 13%                   |                  | 26.3            | 13%             |
| Brazil          | 100                            |                  |               | 37.5           | 37.5            | 38%                   |                  | 37.5            | 38%             |
| Canada          | 6600                           | 3360             |               | 525.0          | 3885.0          | 59%                   |                  | 3885.0          | 59%             |
| China NSFC+MSTC | 440                            |                  |               | 75.0           | 75.0            | 17%                   |                  | 75.0            | 17%             |
| Czech Republic  | 600                            | 15               |               | 262.5          | 277.5           | 46%                   |                  | 277.5           | 46%             |
| Denmark         | 1400                           | 200              | 1100          | 100.0          | 1400.0          | 100%                  |                  | 1400.0          | 100%            |
| Finland         | 100                            |                  |               | 62.5           | 75.0            | 75%                   |                  | 75.0            | 75%             |
| France IN2P3    | 17000                          | 9020             | 2000          | 450.0          | 11470.0         | 67%                   |                  | 11470.0         | 67%             |
| France CEA*     | 5800                           | 4420             |               | 87.5           | 4507.5          | 78%                   |                  | 4507.5          | 78%             |
| Georgia         | 100                            |                  |               | 28.0           | 28.0            | 28%                   |                  | 28.0            | 28%             |
| Germany BMBF    | 14200                          | 13315            | 32            | 687.5          | 14034.5         | 99%                   |                  | 14034.5         | 99%             |
| Germany MPI     | 3300                           | 2075             | 550           | 75.0           | 2700.0          | 82%                   |                  | 2700.0          | 82%             |
| Greece          | 750                            |                  |               | 187.5          | 187.5           | 25%                   |                  | 187.5           | 25%             |
| Israel          | 2100                           | 1000             | 163           | 262.5          | 1425.0          | 68%                   |                  | 1425.0          | 68%             |
| Italy           | 19800                          | 18200            |               | 900.0          | 19100.0         | 96%                   |                  | 19100.0         | 96%             |
| Japan           | 14000                          | 10900            |               | 1125.0         | 12025.0         | 86%                   |                  | 12025.0         | 86%             |
| Morocco         | 150                            |                  |               | 37.5           | 37.5            | 25%                   |                  | 37.5            | 25%             |
| Netherlands     | 6700                           | 6700             |               | 150.0          | 6850.0          | 102%                  |                  | 6850.0          | 102%            |
| Norway          | 1800                           | 1150             | 872           | 150.0          | 2172.0          | 121%                  |                  | 2172.0          | 121%            |
| Poland          | 400                            |                  | 60            | 150.0          | 210.0           | 53%                   |                  | 210.0           | 53%             |
| Portugal        | 900                            | 800              |               | 75.0           | 875.0           | 97%                   |                  | 875.0           | 97%             |
| Romania         | 250                            |                  |               | 25.0           | 25.0            | 10%                   |                  | 25.0            | 10%             |
| Russia#         | 8000                           | 4650             |               | 262.5          | 4912.5          | 61%                   |                  | 4912.5          | 61%             |
| JINR            | 2300                           | 1800             |               | 87.5           | 1887.5          | 82%                   |                  | 1887.5          | 82%             |
| Slovak Republic | 200                            |                  | 15            | 75.0           | 90.0            | 45%                   |                  | 90.0            | 45%             |
| Slovenia        | 660                            |                  |               | 75.0           | 75.0            | 11%                   |                  | 75.0            | 11%             |
| Spain           | 4300                           | 4300             |               | 225.0          | 4525.0          | 105%                  |                  | 4525.0          | 105%            |
| Sweden          | 4700                           | 1240             | 220           | 300.0          | 1760.0          | 37%                   |                  | 1760.0          | 37%             |
| Switzerland     | 8500                           | 8400             | 276           | 150.0          | 8826.0          | 104%                  |                  | 8826.0          | 104%            |
| Taipei          | 1320                           |                  |               | 100.0          | 100.0           | 8%                    |                  | 100.0           | 8%              |
| Turkey          | 200                            |                  |               | 125.0          | 125.0           | 63%                   |                  | 125.0           | 63%             |
| United Kingdom  | 15000                          | 2950             | 5378          | 975.0          | 9303.0          | 62%                   |                  | 9303.0          | 62%             |
| US DOE + NSF    | 35500                          | 13650            | 9385          | 2475.6         | 25510.6         | 72%                   |                  | 25510.6         | 72%             |
| CERN#           | 27400                          | 4260             | 12770         | 87.5           | 17117.5         | 62%                   |                  | 17117.5         | 62%             |
| <b>total</b>    | <b>206320</b>                  | <b>112855</b>    | <b>32821</b>  | <b>10739.5</b> | <b>156415.0</b> | <b>76%</b>            | <b>0</b>         | <b>156427.5</b> | <b>76%</b>      |

\* Revised CP obligation following CEA withdrawal from TDAQ (Oct 2000 RRB)

# Revised CP contributions resulting from the CERN-Russia '5+5' decision in Oct 2000

**In-kind Contributions to ATLAS Common Projects  
by Funding Agency as of February 28, 2002**

|   | value (kCHF) | date of RRB<br>decision |
|---|--------------|-------------------------|
| <b>Australia</b>  |              |                         |
| - Cu shielding (inside LAr cryostats)                                 | 250          | October 1999            |
| <b>Austria</b>  |              |                         |
| - superinsulation for end-cap toroids                                 | 200          | October 1999            |
| <b>Canada</b>   |              |                         |
| - signal feedthroughs for LAr end-cap<br>cryostats (including cables) | 3360         | October 1997            |
| <b>Czech Republic</b>   |              |                         |
| - polyethylene moderator for ID                                       | 15           | April 2001              |
| <b>Denmark</b>  |              |                         |
| - power supply for toroid test station                                | 200          | April 1998              |
| <b>France IN2P3</b>   |              |                         |
| - design of LAr end-cap cryostats                                     | 720          | April 1996              |
| - construction of LAr end-cap cryostats                               | 2650         | October 1997            |
| - cables for LAr barrel cr. feedthroughs                              | 650          | October 1997            |
| - parts of LAr prox. and external cryogenics                          | 5000         | October 1999            |

### **France CEA**

|  |      |              |
|--|------|--------------|
| - design of barrel toroid magnet                                   | 3500 | October 1995 |
| - work on B0 - coil  | 920  | October 1996 |
| - EB welding tool for BT coil casings                              | 800  | April 1998   |
| - EB welding tool for BT coil casings<br>reduction in contribution | -800 | October 2001 |

### **Germany, BMBF**

|   |      |              |
|---|------|--------------|
| - design of LAr end-cap cryostats             | 240  | April 1996   |
| - short sample superconductor                 | 600  | April 1997   |
| - 50% of superconducting cable for<br>toroids | 6800 | October 1997 |
| - construction of LAr end-cap cryostats       | 1325 | October 1997 |
| - elements of BT coil casings                 | 3350 | April 1998   |
| - vacuum pumps for the toroid magnets         | 1000 | October 2000 |

### **Germany, MPI**

|   |      |              |
|---|------|--------------|
| - construction of LAr end-cap cryostats | 1325 | October 1997 |
| - supporting structures for cryolines   | 750  | October 2001 |

### **Israel**

|                            |      |            |
|----------------------------|------|------------|
| - thermal shields for ECTs | 1000 | April 2000 |
|----------------------------|------|------------|

### **Italy, INFN**

|   |      |              |
|---|------|--------------|
| - work on B0 - coil                           | 2450 | October 1996 |
| - 25% of superconducting cable for<br>toroids | 3400 | October 1997 |
| - winding machine for barrel toroid           | 3500 | October 1997 |
| - winding of BT coils                         | 6500 | April 1998   |
| - thermal shields for BT coils                | 1300 | April 1999   |
| - thermal shields for BT coils, add. alloc.   | 250  | April 2000   |
| - engineering work for barrel toroid          | 800  | April 2001   |

## **Japan**

- |                            |       |            |
|----------------------------|-------|------------|
| - design of solenoid       | 300   | April 1996 |
| - construction of solenoid | 10600 | April 1997 |

## **Netherlands, NIKHEF**

- |  |      |              |
|--|------|--------------|
| - vacuum vessels and part of the cold mass for end-cap toroids | 6700 | October 1997 |
|--|------|--------------|

## **Norway**

- |                       |      |            |
|-----------------------|------|------------|
| - LAr storage vessels | 1150 | April 2000 |
|-----------------------|------|------------|

## **Portugal**

- |                      |     |              |
|----------------------|-----|--------------|
| - He storage vessels | 800 | October 1999 |
|----------------------|-----|--------------|

## **Russia**

- |  |       |              |
|--|-------|--------------|
| - current leads for toroid magnets                                       | 100   | April 1999   |
| - tie rods for BT coils  | 300   | April 1999   |
| - mechanical supports for BT test station                                | 150   | April 1999   |
| - tie rods for BT coils, reduction of alloc.                             | - 100 | April 2000   |
| - BT superinsulation   | 200   | April 2000   |
| - ECT cold mass support rods   | 100   | April 2000   |
| - BT warm structure  | 650   | April 2000   |
| - detector support structures (Feet and Rails)                           | 3250  | October 2000 |
| - BT warm structure (reduction in contribution)                          | -400  | October 2001 |
| - detector support structures (Feet and Rails) reduction in contribution | -1200 | October 2001 |

## **JINR**

- |  |      |              |
|--|------|--------------|
| - BT warm structure  | 800  | April 2000   |
| - detector support structures (Feet and Rails)                           | 1000 | October 2000 |
| - BT warm structure (increase in contribution)                           | +400 | October 2001 |
| - detector support structures (Feet and Rails) reduction in contribution | -400 | October 2001 |

## **Spain**

|   |        |              |
|---|--------|--------------|
| - vacuum vessels for the BT coils                       | 5300   | October 1998 |
| - steel for vacuum vessels<br>reduction of contribution | - 1000 | April 2000   |

## **Sweden**

|                            |      |            |
|----------------------------|------|------------|
| - steel for vacuum vessels | 1000 | April 2000 |
| - surveying support        | 240  | April 1999 |

## **Switzerland**

|   |      |              |
|---|------|--------------|
| - 25% of superconducting cable for<br>toroids | 3400 | October 1997 |
| - elements of BT coil casings                 | 5000 | April 1998   |

## **United Kingdom**

|  |      |              |
|--|------|--------------|
| - design of end-cap toroid magnets                       | 1250 | October 1995 |
| - proximity cryogenics for barrel toroid<br>test station | 1700 | October 1998 |

## **US**

|  |      |              |
|--|------|--------------|
| - design of LAr barrel cryostat  | 1960 | April 1996   |
| - construction of LAr barrel cryostat<br>(re-evaluation of CORE contribution<br>after tendering in autumn 1998 ) | 5000 | October 1997 |
| - signal feedthroughs for LAr barrel cr.   | 3530 | October 1997 |
| - high voltage feedthroughs for LAr<br>barrel and end-cap cryostats  | 660  | October 1997 |
| - engineer for central magnet project team   | 400  | October 1999 |
| - parts of LAr prox. and external cryogenics   | 1500 | October 1999 |
| - extension of supply for LAr cryogenics   | 600  | October 2000 |

## **CERN**

|   |      |              |
|---|------|--------------|
| - design of infrastructure elements         | 1900 | April 1998   |
| - current leads for toroid magnets          | 100  | April 1999   |
| - tie rods for BT coils                     | 300  | April 1999   |
| - mechanical supports for BT test station   | 150  | April 1999   |
| - barrel toroid test station mechanics      | 860  | October 1999 |
| - tie rods for BT coils, increase of alloc. | 100  | April 2000   |
| - ECT cold mass support rods                | 100  | April 2000   |
| - BT warm structure                         | 750  | April 2000   |