

COST CALCULATION FOR A CALIBRATION MISSION

The following table shows the cost breakdown for a calibration mission to IEN (Turino), followed by a calibration in Darmstadt and a cross-check calibration at IEN. It is suggested to conduct this campaign in exactly the same manner as the one carried out by Prof.Kirchner, Mr.Ressler and Mr.Robnik in the past. The same transportable VSAT shall be used for reference and comparison. Considering the comparatively labour-intensive set-up, 2 persons shall carry out this task. Mr.Ressler (who has the essential know-how in the field of 2-way time transfer) and Mr.Blanzano (who has been involved in the maintenance of the time laboratory and is experienced in the operations of the VSAT) shall carry out the calibration task. As discussed at the meeting in Torino on 15 November, 2 days per site shall be foreseen to ensure smooth set-up and dismantling of the station as well as enough time for measurements and initial data analysis.

It shall be emphasized that no costs have been charged for preparing of the transport, testing of the equipment prior and after the mission and unpacking/storage after the mission (based on previous experience this amounts to approx. 48 man-hours).

CALCULATION FOR FUTURE CALIBRATION MISSIONS

To reduce the costs for future calibration missions, the utilisation of a fly-away VSAT station is considered. This can be shipped by air. Only one scientist or engineer carrying out the calibration will be necessary (assuming that local support can be provided at each calibration site). As future missions are expected to be more routine, the working time per site can be reduced. The average cost for a calibration mission to a site in Europe is shown below:

	costs		
	Euro		
Transport earth station			530
Air ticket			850
	man-hours	hourly rate	
		Euro	
Overall travel time	10	71,5	715
Earth station set-up, dismantling, calibration	10	71,5	715
	days/nights	cost/unit	
Hotel	1	75	75
Per diem	2	45	90
TOTAL			2975