





## CERN CFS resources for Linear Colliders 2013-2017

		2013	2014	2015	2016	2017
John Osborne	Civil Engineer	20%	20%	20%	20%	20%
Caroline Waaijer	Fellow working mainly on environmental and cost issues	100%	100%	100%		
CE Draughts-person	CATIA drawings/layouts	10%	10%	10%	10%	10%
Martin Gastal	Scheduling	10%	10%	10%	10%	10%
Keith Kershaw	Trnsport and Installation	20%	20%	20%	20%	20%
Helene Mainaud	Survey & Alignment	40%	40%	40%	40%	40%
Budget for external Consultants		20,000CHF	20,000CHF	20,000CHF	20,000CHF	20,000CHF

Note: Other CERN resouces may be available for CLIC Study eg HVAC

## CLIC Implementation studies: Civil Engineering and Services 2012-2017

WP: IS-CES Workpackage leader: J. Osborne	Purpose/Objectives/Goals	Deliverables (incl. approx. resource estimate)		
Task 1: Site studies	Develop site criteria, conduct geological investigations, optimize site layout & shaft positions	<ol> <li>Establish site selection matrix,</li> <li>Produce internal Siting Studies report,</li> <li>Issue Siting Studies report to external authorities</li> </ol>		
Task 2: Environmental Impact	Prepare Environmental Impact Study	Outline of Environmental     Impact document, 2. Issue     Environmental Impact document		
Task 3: Services	Update technical definition of services	Electrical distribution 2. Cooling     wentilation 3. Handling &     transport 4. Survey and alignment		

Note: this study includes the new Rebaselining exercise that has started

J.Osborne (CERN) for CFS

## CLIC Implementation studies: Project Implementation Plan 2012-2017

WP: IS-PIP Workpackage leader: Ph. Lebrun	Purpose/Objectives/Goals	Deliverables (incl. approx. resource estimate)		
Task 1: PBS/WBS	Update and maintain project PBS/WBS compatible with revised parameters and configuration in PP phase	1. First update of PBS/WBS for value estimate, 2. Final update of PBS/WBS for project submission		
Task 2: Value estimate	Refine value estimates compatible with revised parameters and configuration in PP phase; conduct value engineering of critical cost drivers	Revised value estimates		
Task 3: Schedule	Update and maintain general schedule	Updated general schedule, 2.     Updated detailed schedules for system/component production		
Task 4: Safety	Conduct preliminary safety assessment of project	Preliminary safety document; 2. Conduct safety hearings of critical systems, 3. Final safety document		
Task 5: Energy & power	Refine energy and power consumption estimates; identify and develop actions towards energy and power efficiency (e.g. load shedding, heat recovery)	Definition of operating modes influencing power consumption, 2.     Updated power & energy consumption estimates		