



# R&D for the International Linear Collider

Report by the R&D Board

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# 1 Introduction

The document addresses high priority R&D for the ILC. The items included will have a major impact on the performance or the cost of the ILC and may affect the layout. When the time to achieve the required research results extends beyond the EDR phase ways of risk mitigation are outlined.

The transition to the engineering is outlined when necessary.

## 2 Global R&D strategy

Responsible: B Willis

### 2.1 Assumptions on time lines

Define baseline

2007 – 2009	EDR phase
2010 – 2011	Approval
2012 – 2018	Construction
2019 – 2020	Commissioning

### 2.2 Risk mitigation

### 2.3 Treatment of alternative solutions

We have to define what this is. Is it a fixed delay over the baseline program? When is the delay incurred – most likely during the approval phase? How can this time be used?

## 3 Report from the task forces

### 3.1 S0/S1

Responsible: L Lilje, M Ross

#### 3.1.1 Ideal plan

#### 3.1.2 Resources

#### 3.1.3 Adapted plan

This plan is likely to be the baseline.

### 3.2 S2

Responsible: T Himel, H Padamsee (tbc)

**3.2.1 Full program including all test facilities**

**3.2.2 Minimal scope for baseline**

**3.2.3 Assessment of facilities required**

**3.2.4 Funding**

**3.3 S3**

Responsible: A Wolski, E Elsen

**3.3.1 e-cloud**

**3.3.2 Use of facilities to establish experimental result**

**3.3.3 Funding requirements**

**4 Remaining R&D**

Responsible: C Damerell, T Garvey (tbc) O Napoly (tbc)

**4.1 *Definition of critical R&D***

**4.2 *Strategy***

**5 Conclusions**

**6 Appendix**

This section may contain tables of R&D projects