

Technical Ladder Competencies

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Technical Ladder Competencies describe the expectations towards employees

Technical Ladder Competencies

Innovation

Business Impact

Thought Leadership

Problem Solving

Technical Knowledge

- › TL Competencies describe the **expectation** towards **Technical Ladder** employees for **every level**.
- › They provide orientation towards employees what kind of **knowledge**, **skills** and **abilities** is required to successfully fulfill their role.
- › The descriptions of the competencies are **scaled** to reflect **changing expectations** and requirements. Therefore, the descriptions vary across TL levels.

Technical Ladder Competencies

INNOVATION

This criterion measures **innovation competency**:

- › Be open to new ideas and receptive to other ways of thinking or working
- › Have the passion to develop new and creative ideas with added value.
- › Accept uncertainty while balancing risks and opportunities
- › Push ideas to their full implementation and application

BUSINESS IMPACT

This criterion measures a technical expert's **drive to implement ideas and create business value**:

- › Identify and promote profitable business opportunities
- › Develop and strengthen customer relations at expert and/or management level that offer added value
- › Develop innovative ideas which lead to optimized system cost and performance resulting in higher revenue

THOUGHT LEADERSHIP

This criterion measures a technical expert's ability **to set direction** in his/her respective area of expertise:

- › Take ownership of technical decisions and proactively advise management and cross-functional partners
- › Set technical direction and take responsibility for implementation
- › Strengthen close collaboration and leverage on synergies with internal and external experts
- › Be a mentor, share knowledge and foster your talents

PROBLEM SOLVING

This criterion measures a technical expert's **ability to solve and prevent problems**:

- › Turn problems into opportunities for continuous improvement
- › Resolve day-to-day issues and complex technical problems
- › Provide new thoughts, impulses and directions
- › Anticipate and proactively prevent deviations
- › Ensure that lessons learned are implemented across organizational boundaries

TECHNICAL KNOWLEDGE

This criterion measures the **level of technical knowledge relevant** for IFX:

- › Actively acquire and apply state-of-the-art knowledge
- › Proactively drive best practice and know-how exchange
- › Document and share your knowledge
- › Create and protect Infineon's intellectual property

Expectation towards Technical Ladder employees on different levels

- › Starting with the Level Principal Engineer all TL **positions require a leadership role** of their own accompanied by a **broader influence on the company**.
- › As a high performance company we focus on an **selective approach** for these Technical Ladder levels:
 - We expect **maximum business impact** of our technical experts
 - Evaluation needs to be based on **outstanding personal & professional qualities** as described within TL Competencies
 - Promotions to level Principal Engineer need to be challenged with same thoroughness as nominations to Lead Principal Engineer & above
 - **Management is in charge** of ensuring this by carefully cross-checking nominations and review of existing TL members




- › At the TL levels Staff Engineer and Senior Staff Engineer the focus is on Technical Knowledge.
- › The **Technical Ladder title** on these levels **expresses**
 - rather the **potential** for a Technical Ladder career of an employee
 - and is a **sign of recognition** of the employee's technical expertise

18	Senior Fellow
17	Fellow
16	Distinguished Engineer
15	Senior Principal Engineer
14	Lead Principal Engineer
13	Principal Engineer

12	Senior Staff Engineer
11	Staff Engineer

Technical Ladder Competency Matrix

Level Staff Engineer & Senior Staff Engineer

 TECHNICAL LADDER	Staff Engineer (TL 11)	Senior Staff Engineer (TL12)
Innovation	Creates and supports innovative ideas in his/her field of knowledge collaboratively	Creates and supports innovative ideas in his/her field of knowledge collaboratively
Business Impact	Has measurable impact on working results on a local basis	Has measurable impact on working results within organizational area
Thought Leadership	Contributes to success of project/team Shares knowledge within project/team	Gives technical guidance Demonstrates active knowledge transfer and best practice sharing
Problem Solving	Has proven ability to solve problems	Has proven ability to solve complex problems
Technical Knowledge	Minimum total score in technical knowledge matrix: 4 points	Minimum total score in technical knowledge matrix: 8 points

Technical Ladder Competency Matrix

Level Principal Engineer

TECHNICAL LADDER	Level Principal Engineer (TL 13)
Innovation	<ul style="list-style-type: none">› Observes and proactively acts on trends in his/her field of knowledge› Has a sense of urgency for upcoming innovation and supports feasibility studies› Collaboratively creates and supports innovative ideas in his/her field of expertise› Investigates new ideas, considering alternatives and drives active risk management
Business Impact	<ul style="list-style-type: none">› Represents technical competence of his/her field of knowledge within own BL/Functional Area› Has measurable impact on BL/Functional Area business value› Implementation of strategy within his/her field of expertise› Contribution to IP strategy in his/her field of expertise
Thought Leadership	<ul style="list-style-type: none">› Drives technical decisions for BL/Functional Area and executes implementation› Demonstrates active knowledge transfer and best practice sharing across organizational boundaries› Is known within his/her fields of knowledge within IFX› Has a network in his/her field of expertise and relevant community
Problem Solving	<ul style="list-style-type: none">› Has proven ability to solve problems with higher complexity involving expert networks› Exploits deviations in order to support continuous improvement ensuring that IFX stands out as quality leader (zero defects)› Supports problem solving, generates analysis and hypothesis, draws conclusions out of own analysis and derives lessons learned
Technical Knowledge	<ul style="list-style-type: none">› Deep technical understanding in his/her field of expertise› Understanding of own impact and interdependencies within his/her field of expertise› Minimum total score in technical knowledge matrix: 14 points

Technical Ladder Competency Matrix

Level Lead Principal Engineer

TECHNICAL LADDER

Level Lead Principal Engineer (TL 14)

Innovation

- › Observes and proactively acts on trends in his/her field of knowledge
- › Has and creates a sense of urgency for upcoming innovation and initiates feasibility studies
- › Facilitates and encourages innovation within his/her field of expertise
- › Coaches & challenges new ideas, actively balances risks and opportunities and drives decisions

Business Impact

- › Represents technical competence of his/her field of knowledge within several BLs/Functional Areas
- › Contributes substantially to BL/Functional Area business value
- › Contribution to roadmap/standards definition with industry partners
- › Contribution to development and implementation of strategy within his/her field of expertise
- › Proactively develops and strengthens relations on IFX top management level
- › Contribution to the IP strategy in his/her field of expertise providing exploitation options

Thought Leadership

- › Makes technical decisions for BL/Functional Area and takes responsibility for implementation
- › Is a mentor, shares knowledge and fosters talents
- › Is well known within his/her fields of expertise within IFX
- › Has a network within IFX and relevant community (e.g. cooperation partners, universities, institutes)
- › Fosters patent creation and IFX reputation through publications and speeches

Problem Solving

- › Has proven ability to solve problems with higher complexity by pro-actively involving expert networks
- › Exploits deviations in order to support continuous improvement ensuring that IFX stands out as quality leader (zero defects)
- › Drives problem solving, hypothesis prioritization, draws conclusions out of analyses and derives lessons learned

Technical Knowledge

- › Deep technical understanding in his/her field of expertise
- › Understanding of own impact and interdependencies within his/her field of expertise
- › Minimum total score in technical knowledge matrix: 16 points

Technical Ladder Competency Matrix

Level Senior Principal Engineer

TECHNICAL LADDER

Level Senior Principal Engineer (TL 15)

Innovation

- › Observes and proactively acts on trends
- › Has and creates a sense of urgency for upcoming innovation and initiates feasibility studies
- › Facilitates and encourages innovation across boundaries
- › Coaches & challenges new ideas, actively balances risks and opportunities and drives decisions

Business Impact

- › Represents technical competence of division/ function
- › Contributes substantially to BL/Functional Area business value
- › Contribution to and influence on roadmap/standards definition with industry partners
- › Substantial contribution to development & implementation of strategy within his/her field of exp.
- › Proactively develops and strengthens relations on IFX top management level
- › Contributes substantially to the IP strategy in his/her field of expertise providing exploitations options

Thought Leadership

- › Makes technical decisions for several BLs/Functional Areas and takes responsibility for implementation
- › Is a mentor, shares knowledge and fosters talents
- › Is well known within IFX and beyond in his/her fields of expertise and in relevant industry
- › Has a large network within IFX and relevant community (e.g. cooperation partners, universities, institutes)
- › Fosters patent creation and IFX reputation through publications and speeches

Problem Solving

- › Has proven ability to solve critical problems with high complexity by pro-actively involving expert networks
- › Exploits deviations in order to support continuous improvement ensuring that IFX stands out as quality leader (zero defects)
- › Orchestrates problem solving and hypothesis prioritization, draws conclusions out of analyses and derives lessons learned

Technical Knowledge

- › Is the technical expert and adviser in his/her field of expertise
- › Understands and connects interdependencies within his/her field of expertise

Technical Ladder Competency Matrix

Level Distinguished Engineer

TECHNICAL LADDER

Level Distinguished Engineer (TL 16)

Innovation

- › Observes and generates trends
- › Has and creates a sense of urgency for upcoming innovation and sets direction
- › Creates an environment that encourages innovation and "big steps"
- › Coaches & challenges new ideas, actively balances risks and opportunities and makes decisions

Business Impact

- › Represents core competence of own Division/Function
- › Contributes substantially to division's/function's business value
- › Substantial contribution to and influence on roadmap/standards definition with industry partners
- › Strategy development and implementation of Divisional/Functional core competence based on deep industry understanding
- › Proactively develops and strengthens relations on Infineon top/executive management level
- › Is responsible for the IP strategy of divisional/functional core competence providing exploitation options

Thought Leadership

- › Makes technical decisions for own Division/Function and takes responsibility for implementation
- › Is a mentor, shares knowledge and fosters talents
- › Is well known within Infineon and beyond in his/her fields of expertise and is a recognized expert in relevant industry
- › Has a large network within industry and relevant community (e.g. cooperation partners, universities, institutes)
- › Fosters patent creation and Infineon reputation through publications and speeches

Problem Solving

- › Has proven ability to solve mission-critical problems
- › Exploits deviations in order to support continuous improvement ensuring that IFX stands out as quality leader (zero defects)
- › Creates an environment which allows orchestration of problem solving, drives hypothesis prioritization, draws conclusions out of analyses and derives lessons learned

Technical Knowledge

- › Is the technical adviser of division/function
- › Understands and connects interdependencies within core competence of own division in a holistic way

Technical Ladder Competency Matrix

Level Fellow

TECHNICAL LADDER	Level Fellow (TL 17)
Innovation	<ul style="list-style-type: none">› Observes and generates trends› Has and creates a sense of urgency for upcoming innovation and sets direction› Creates an environment that encourages innovation and "big steps"› Coaches & challenges new ideas, actively balances risks and opportunities and makes decisions
Business Impact	<ul style="list-style-type: none">› Represents core competence of several divisions/functions› Contributes substantially to IFX's business value with impact on several divisions/functions› Strong directional influence on roadmap/standards definition with industry partners› Strategy development and implementation within an IFX core competence based on deep industry understanding› Proactively develops and strengthens relations on IFX executive management and board level› Is responsible for the IP strategy within an IFX core competence providing exploitation options
Thought Leadership	<ul style="list-style-type: none">› Makes technical decisions with impact on several divisions/functions and takes responsibility for implementation› Is a mentor, shares knowledge and fosters talents› Is well known within IFX and industry and is recognized as a technical leader in relevant industry› Has a large network at top level within industry and relevant community (e.g. cooperation partners, universities, institutes)› Fosters patent creation and IFX reputation through publications and speeches
Problem Solving	<ul style="list-style-type: none">› Has proven ability to solve mission-critical problems› Exploits deviations in order to support continuous improvement ensuring that IFX stands out as quality leader (zero defects)› Creates an environment which allows orchestration of problem solving, drives hypothesis prioritization, draws conclusions out of analyses and derives lessons learned
Technical Knowledge	<ul style="list-style-type: none">› Technical adviser of division/function and/or IFX Board› Understands and connects interdependencies within core competence of several divisions in a holistic way

Technical Ladder Competency Matrix

Level Senior Fellow

TECHNICAL LADDER

Level Senior Fellow (TL 18)

Innovation

- › Observes and generates trends
- › Has and creates a sense of urgency for upcoming innovation and sets direction
- › Creates an environment that encourages innovation and "big steps"
- › Coaches & challenges new ideas, actively balances risks and opportunities and makes decisions

Business Impact

- › Represents strategic fields and/or core competence of IFX
- › Contributes substantially to IFX's business value with impact on several divisions/functions
- › Sets direction on roadmap/standards definition with industry partners
- › Strategy development and implementation of IFX core competence based on deep industry understanding
- › Proactively develops and strengthens relations on IFX executive management and board level
- › Is responsible for the IP strategy of IFX core competence providing exploitation options

Thought Leadership

- › Makes break-through technical decisions with impact on IFX strategy and takes responsibility for implementation
- › Is a mentor, shares knowledge and fosters talents
- › Has a worldwide reputation as technical leader in relevant industry
- › Has a large network at executive level within industry and government
- › Fosters patent creation and IFX reputation through publications and speeches

Problem Solving

- › Has proven ability to solve mission-critical problems
- › Exploits deviations in order to support continuous improvement to ensure that IFX stands out as quality leader (zero defects)
- › Creates an environment which allows orchestration of problem solving, drives hypothesis prioritization, draws conclusions out of analyses and derives lessons learned

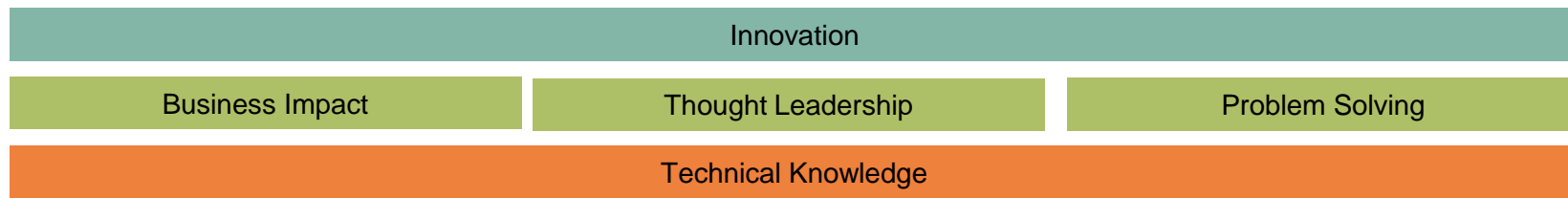
Technical Knowledge

- › Technical adviser of IFX Board
- › Understands and connects interdependencies within IFX in a holistic way

Assessment of Technical Ladder Criteria based on the TL Competencies

- › The **allocation** of individual employees to a specific Technical Ladder level is contingent upon their **fulfillment of all criteria within that level**.
- › TL assignments also have to be **matched** with the **demand** (target tree) derived from business strategy.
- › The manager uses the **STEPS** process to **assess** an employee's performance on the basis of the Infineon Technical Ladder competencies to consider a Technical Ladder nomination or review. Their fulfillment is subject to an annual review.

Technical Ladder Competencies



- › **Technical Knowledge** is assessed by the **degree of expertise** in different Subfields of Knowledge, they do not have to come from the same Field of Knowledge or Functional Area. The maximum number of Subfields per candidate is four.
- › The FoK Catalogue is the **basis for the assessment of Technical Knowledge** as one part of the TL Competency Matrix.

Assessment of TL Competence Technical Knowledge

Definition of degrees of expertise

Technical Knowledge			
Degree of Expertise	Solid	Experienced ¹	Outstanding ¹
	<p>Years of Experience ≥ 4 yrs*</p> <ul style="list-style-type: none"> › Knowledge already successfully put into practice › Milestone definition & resource planning › Symposium; File/Patents published** › Works independently › Application of systematic methods to solve problems › Improvement of projects <p>Impact within Location</p> <p>* general indication **R&D only</p>	<p>Years of Experience ≥ 6 yrs*</p> <ul style="list-style-type: none"> › Pro-active contribution › Process-driver › Provides technical training to others › Initiates new ideas › File/Patents published › Technical Papers** › Solve complex problems, i.e. through analytical thinking/analysis as well as extensive usage of an expert network › Improvement of projects <p>Impact within Location, small CF or BL</p>	<p>Years of Experience ≥ 8 yrs*</p> <ul style="list-style-type: none"> › First person that comes to mind › Provides technical training to others › Innovative with regard to problem solving › File/Patents published › Technical Papers** › System solutions › Solves problems with breakthrough solutions › Pro-active identification of business opportunities › Definition of new methodology <p>Impact within IFX, Division or CF</p> <p>* general indication **R&D only</p>
	2 points, if requirements are fulfilled	4 points, if requirements are fulfilled	12 points, if requirements are fulfilled

¹fulfillment of requirements of previous degree is assumed

Assessment of TL Competence Technical Knowledge

Definition of degrees of expertise per level

Level	Minimum score required	Highest reachable degree of expertise
Staff Engineer	4 points	Experienced
Senior Staff Engineer	8 points	Experienced
Principal Engineer	14 points	Outstanding
Lead Principal Engineer	16 points	Outstanding
Senior Principal Engineer	16 points	Outstanding
Distinguished Engineer	Top Expert in own field of knowledge	
Fellow	Top Expert, sets direction IFX as a whole	
Senior Fellow	Top Expert, sets direction IFX as a whole	



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