

Power that changes the future!

NCS

NATIONAL COMPETENCY STANDARDS

National Competency Standards



NCS

National Competency Standards

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- II. NCS Development & Improvement Processes and the Role of HRDK
- III. Application of NCS

NCS

I.

Overview of National Competency Standards

NCS

N A T I O N A L C O M P E T E N C Y S T A N D A R D S

Definition of NCS

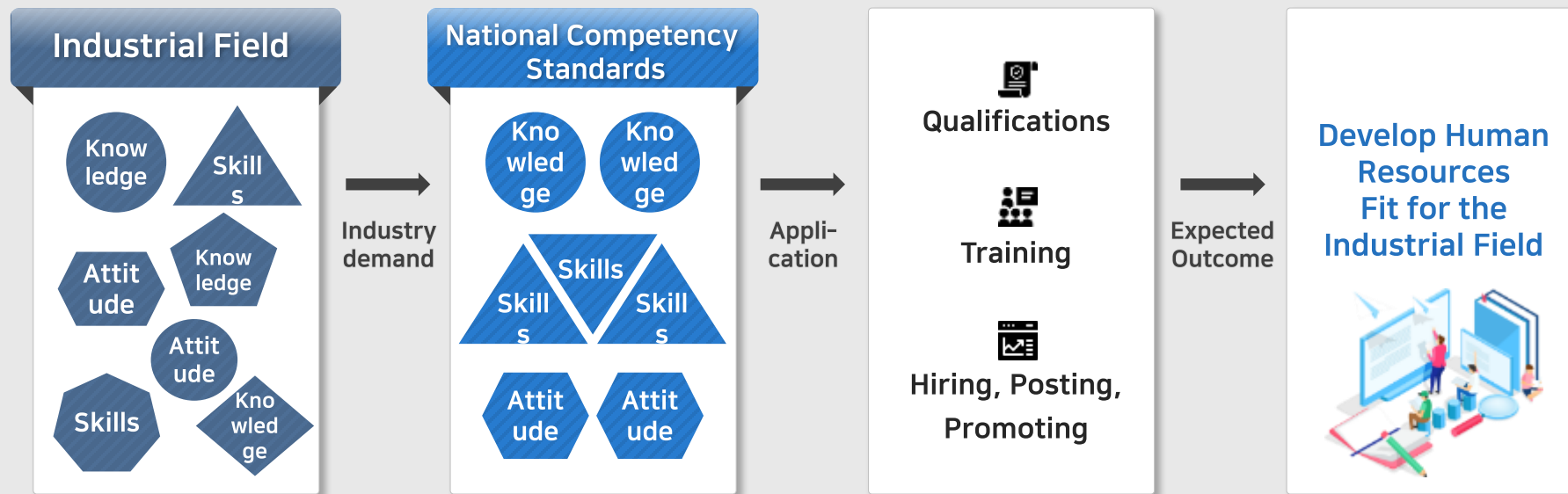
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National Competency
Standards

NCS

N A T I O N A L C O M P E T E N C Y S T A N D A R D S

NCS is the standardization of competencies (knowledge, skill, attitude) required to successfully perform duties in industrial fields, which promotes field-focused talent development and systematic human resource management.



Background of NCS

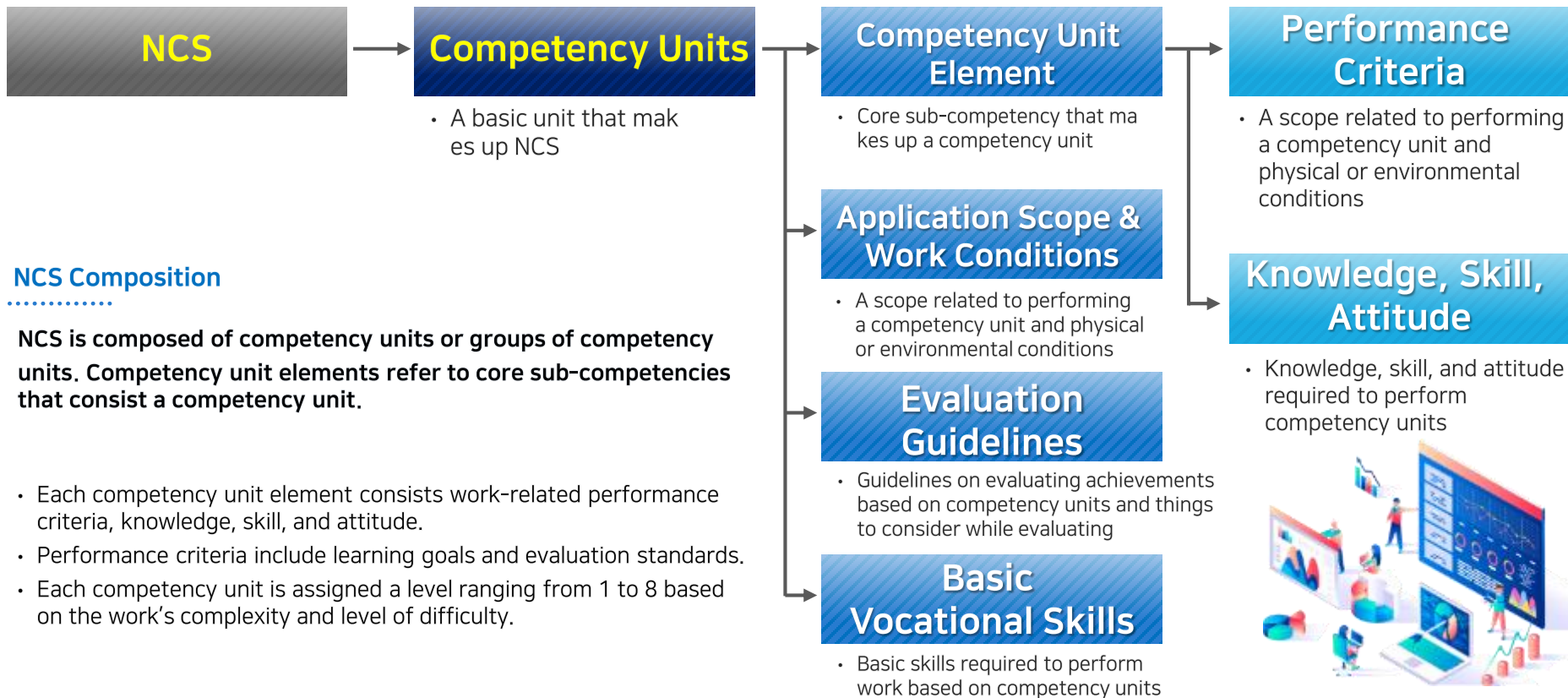
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- Industrial field - education & training - skills mismatch
- Ineffective management of human resources

	Issues of National Talent Development	Advancement of National Talent Development
Workplace	<ul style="list-style-type: none"> Worsening job & skills mismatch Lack of core/high-skilled workers 	<ul style="list-style-type: none"> Specify industry's demand and needs, establish a system reflects them
Training	<ul style="list-style-type: none"> Lack of talent development of those who have required competencies for industrial fields Ineffective training 	<ul style="list-style-type: none"> Reflect changes in the industry and talent structures Develop processes applicable for the field Expand training opportunities and access
Qualification System	<ul style="list-style-type: none"> Supplier-based system Lack of applicability of qualifications in the field Lack of credibility of qualifications 	<ul style="list-style-type: none"> Reflect changes in the industry and talent structures Secure applicability of qualifications in the field (new, modified, evaluated)

Composition of NCS

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Examples of NCS

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Movie contents production

Movie contents production is the process of discovering stories for the purpose of screening in theaters and various media, and making videos through collaboration between experts in each field.

Type No.	Competency Units	Level	Competency Unit Elements
0803020210_22v3	Scenario production analysis	5	<ul style="list-style-type: none"> Analyzing Scenario Elements Analyzing the Scenario Paradigm Analyzing the screenplay
0803020211_16v2	Scenario creation	5	<ul style="list-style-type: none"> Organize synopsis Write scenario Dramatize



NCS Level System

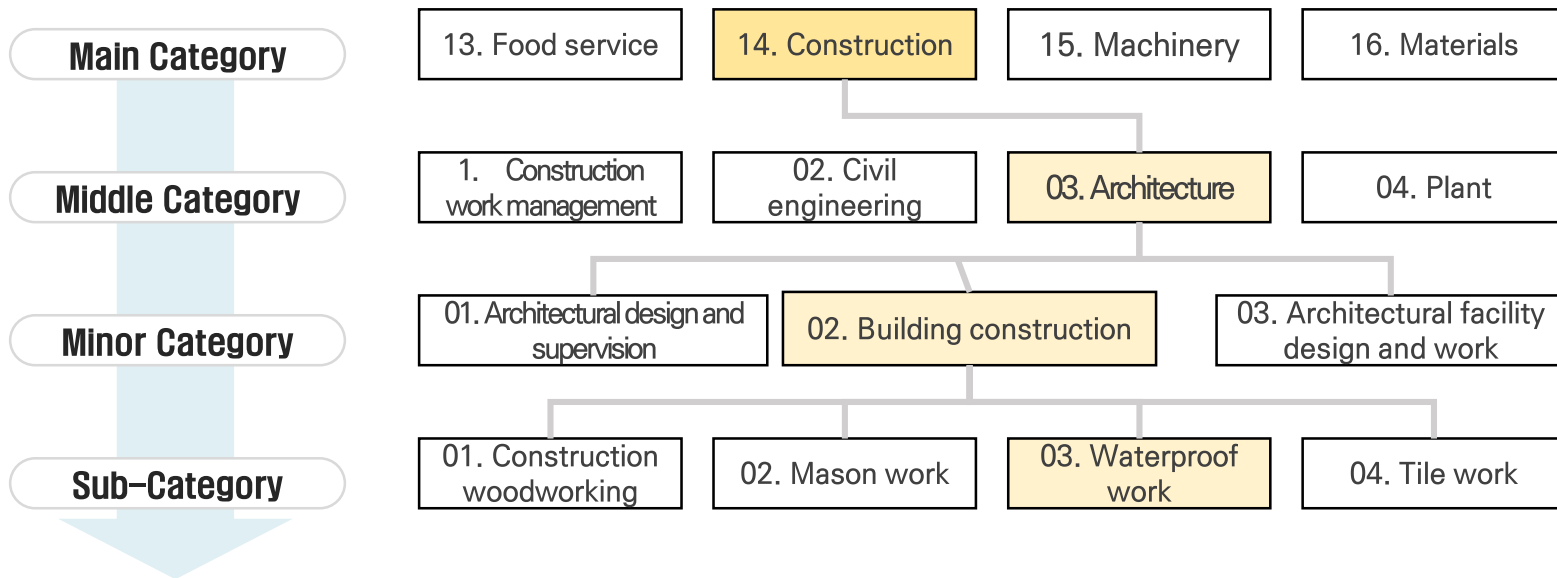
NCS Levels	Notes
Level 8	Able to perform broad-ranging technical work with the highest degree of skills in the sector and be given authority and responsibility over the organization and overall work
Level 7	Able to perform broad-ranging work with the high degree of skills in the sector and bear obligation and responsibility for others' work performance
Level 6	Able to perform a variety of work with the general degree of skills and communicate the industry knowledge and know-hows to others under independent authority
Level 5	Able to perform very complex and non-routine work and communicate industry expertise to others under comprehensive authority
Level 4	Able to perform complex and various work by applying theories and knowledge of the sector under general authority
Level 3	Able to perform somewhat complex work by applying basic theories and general knowledge of the sector under restricted authority
Level 2	Able to perform routine work by following processes and applying basic knowledge of the sector under general directions and strict supervision
Level 1	Able to perform routine work by following processes and applying basic knowledge of the sector under general directions and strict supervision

Examples of NCS

Type No.	• 0803020211_16v2
Name of Competency Unit	• scenario creation
Definition of Competency Unit	• Scenario creation is the competency to create a story that is suitable for an established project proposal to produce movies
Type No.	• Performance Criteria
0803020211_16v2.1 Organize synopsis	1.1 Decide key characteristics and genre of movies by discovering suitable materials for the intention of planning and selecting topics.
	1.2 Select suitable characters that are appropriate for determined characteristics and genre and make stories.
	1.3 Organize synopsis with a specific character's history and entire story based on a rough story.
	Knowledge <ul style="list-style-type: none"> • Knowledge of the characteristics of each movie genre • Knowledge of the scenario structure • Knowledge of the latest movie industry trend
	Skills <ul style="list-style-type: none"> • Ability to write a virtual story • Ability to analyze the personality of audiences
	Attitude <ul style="list-style-type: none"> • Observation and attention regarding a social phenomenon • Having an interest in current topics and taking notes

Classification of NCS

- NCS is categorized into main/middle/minor/sub-categories to prevent redundancy and omission of NCS development and improvement while improving user's accessibility and usability.



NCS Competency Unit
 Classification No. (Code)

1503020301_21v1							
14	03	02	03	01	–	21	v1
Main Category	Middle Category	Minor Category	Sub-Category	Competency Units		Development Year	Version

14. 건설

영분류	소분류	세분류	능역단위
01. 건설공사관리	01. 건축설계·관리	01. 건축목공사공	01. 조적미장시공 도면검토
02. 토목	02. 건축시공	02. 조적미장시공	03. 조적미장시공 계획수립
03. 건축	03. 건축설비설계·시공	03. 방수시공	04. 조적미장시공 작업준비
04. 플랜도		04. 타일시공	05. 기준설정 및 규준틀 설치
05. 조경		05. 건축도장시공	06. 벽돌 쌓기 작업
06. 도사·교통		06. 철근콘크리트시공	07. 블록 쌓기 작업
07. 건설기계운전·정비		07. 창호시공	

* <http://www.ncs.go.kr>

NCS

II.

NCS Development/Improvement Processes & HRDK's Role

Progress on NCS Development & Improvement

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General Progress of NCS Development & Improvement

Type	2014	2015	2016	2017	2018	2019	2020	2021	2022
	797 jobs	847 jobs	897 jobs	948 jobs	1,001 jobs	1,022 jobs	1,039 jobs	1,064 jobs	1,083 jobs
Number of Developed NCS	557 jobs including road design	50 jobs including overseas employment management	50 jobs including patent engineering	50 jobs including IoT network establishment	50 jobs including AI platform establishment	20 jobs including flexible display development	10 jobs including self-driving hardware development	10 jobs including smart factory system management	11 jobs including digital twin design
Development Organization	115 organizations including Korea Construction Equipment Manufacturers Association	30 organizations including Korea Printers Association	28 organizations including Korea Association of Robot Industry (KAR)	24 organizations including Korea Financial Investment Association	27 organizations including Korea Industrial Technology Association (KITA)	12 organizations including Korea Information Security Industry Association (KISIA)	4 organizations including Korea Electronics Association	5 organizations including Korea Association of Machinery Industry (KOAMI)	9 organizations including Korea Software Industry Association (KOSA)
Number of Improved NCS	-	79 jobs including management planning	403 jobs including machine element design	191 jobs including architecture supervision	103 jobs including injection mold assembly	100 jobs including application S/W engineering	145 jobs including machine control design	including Korean cooking 114 jobs	132 jobs including petrochemical product manufacturing
Improvement Organization	-	15 organizations including Korea Chamber of Commerce and Industry	75 organizations including Korea Financial Investment Association	47 organizations including Korea Iron & Steel Association	37 organizations including Korea Electrical Contractors Association	30 organizations including Korea Die & Mold Industry Cooperative	31 organizations including Korea Ceramics Association (KOCERA)	26 organizations including Korea Energy Engineers Association	19 organizations including Korea Chamber of Commerce and Industry

Progress on NCS Development & Improvement

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General Progress of NCS Development & Improvement

Development

- Developed 1,083 NCS reflecting changes in the industrial fields and industry landscapes during 2013-2022
- Established a virtuous cycle of nurturing talent based on industry demand by developing ISC-led NCS

Improvement

- Improved 1,599 NCS through ISC and relevant cooperation organizations during 2015 & 2022
- Applied job maps by industry sector and Sectoral Qualification Framework (SQF) to improve applicability of NCS in the field

Detailed Status of NCS Development

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- As of December 2022, developed a total of 13,053 competency units with 24 NCS in the main category, 81 NCS in the middle category, 271 NCS in the minor category, and 1,083 NCS in the sub-category
- Every year, develop about 10 new NCS (sub-category) and improve about 100 NCS, reflecting changes in the lab or market and technologies

	Main Category	Middle Category	Minor Category	Sub-Category
1	Business management	1	2	5
2	Management, accounting, administration	4	11	29
3	Finance, insurance	2	9	36
4	Education, nature, social science	2	3	8
5	Law, police, firefighting, prison, national defense	2	4	16
6	Health and medical care	1	2	11
7	Social welfare, religion	3	6	17
8	Culture, arts, design, broadcasting	3	9	61
9	Driving, transportation	4	8	31
10	Sales	3	8	18
11	Security, cleaning	2	2	4
12	Service, accommodation, tourism, entertainment, sports	4	12	46

	Main Category	Middle Category	Minor Category	Sub-Category
13	Food service	1	3	12
14	Construction	8	28	132
15	Machinery	11	36	139
16	Materials	2	10	48
17	Chemical/Bio	5	17	53
18	Fabric, clothes	3	8	26
19	Electrical, electronic	3	36	115
20	Information communication	3	17	111
21	Food processing	2	4	21
22	Printing, wood, furniture, crafts	2	4	23
23	Environment, energy, safety	6	19	67
24	Agriculture, fishing	4	13	54

Organizations & Roles Related to NCS Development & Improvement

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HRDK

HRDK 한국산업인력공단

- Manage overall NCS development and improvement (budgeting, quality control, etc.)
- Provide guidelines and manuals
- Organize and operate talent pools

Quality Control Committee

(Deliberation and decision-making body)

- Select subjects of NCS development, improvement, and abolition
- Select NCS development/improvement organizations
- Deliberate and make decisions on job categorization, name change, NCS divisions, etc.
- Manage overall quality of improvement and development on NCS quality control

Inspection Committee

- NCS quality control (more than twice)
- About 5 experts, 1-2 officials from ministries in charge

Development Team/ Improvement Team FT

FACILITATOR

- NCS development and improvement
- Utilization package development and improvement
- **Development** 7 industry, 3 education, 1 qualification
- **Improvement** 5 industry, 2 education, 1 qualification

Development/ Improvement Organizations

(ISC, SC, etc.)

- Organize development/improvement teams/host workshops
- Manage schedules for NCS and utilization package development/improvement
- Environmental analysis and industry verification (twice)
- Execute and settle project expenses
- Inspect outcomes

NCS Development & Improvement Organizations

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- When the sectors are in the Industry Sectoral Council (ISC), organizations in the ISC develop and improve NCS. If not, NCS is developed and improved by organizations selected through open contests.
- When development and improvement organizations are unable to be selected and improvements are simple, the HRDK may develop or improve on its own.

ISC Composition (As of April, 2023, 19 sectors)

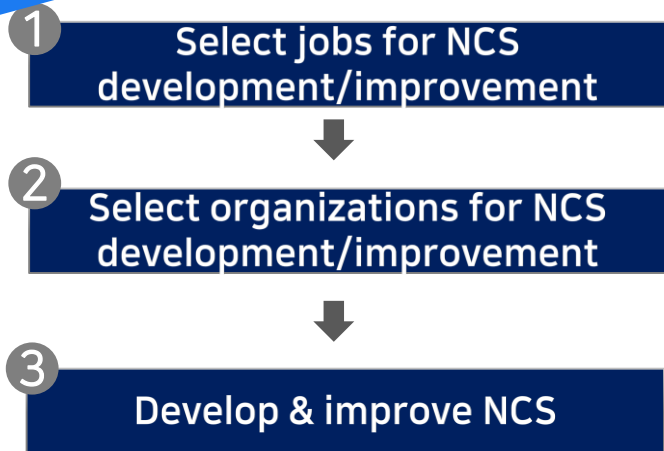


Main Procedures of NCS Development & Improvement

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- NCS development and improvement projects shall be led by development/improvement organizations selected according to the “Rules and Regulations about the NCS Development/Improvement/Abolition”
- The following are the project procedures' five steps:

Steps 1-5



1) Select jobs for NCS development/improvement

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- The HDRK gathers input on NCS development/improvement from industry and associated ministries and conducts a feasibility study.
- The NCS Quality Control Committee selects jobs subject for NCS development and improvement based on the demand for workforce and trainings.

Project Content			Related
1 Development & Improvement Select jobs	[Opinion Collection]	• Discover demand from NCS Wiki (Public, website), industry, related ministries, etc.	• Industry, etc.
	[Feasibility Study]	• Assess the feasibility of NCS development and improvement based on the demand from the collected opinions.	• HRDK
	[Subject Selection]	• The NCS Quality Control Committee deliberates and decides on the jobs subject for development and improvement	• HRDK
	[Ministry-level Discussion]	• Relevant ministries confirm jobs for development and improvement among those selected through deliberation and resolution	• MOEL
	[Confirmation of Jobs]	• Finalize jobs for development & improvement	• MOEL (HRDK)

2) Select organizations for NCS development/improvement

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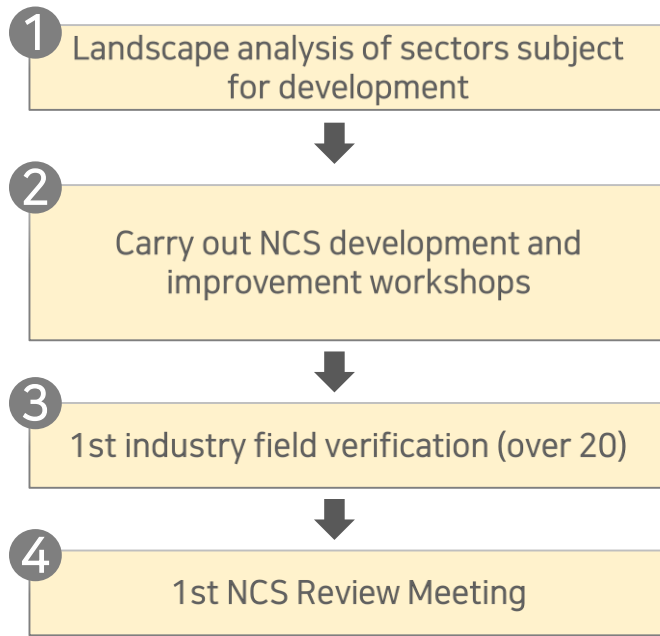
- The HRDK selects ISC as the development/improvement organization if it fits under the ISC's responsibility, and reviews the Project Plan's appropriateness.
- Any sector that falls outside of the responsibility of the ISC must submit a Project Application, which will be reviewed and selected by the HRDK based on the organization's expertise and representativeness.

Project Content		Related	
2 Development & Improvement Select Organizations	[Open Calls]	<ul style="list-style-type: none">• Open call for organizations to carry out development/improvement projects in sectors outside the ISC responsibility	<ul style="list-style-type: none">• HRDK
	[Plan Submission]	<ul style="list-style-type: none">• Participating organizations have to submit a Project Plan for NCS development and improvement.	<ul style="list-style-type: none">• Development & Improvement Organization
	[Selection Evaluation]	<ul style="list-style-type: none">• Assess the selection of organizations with expertise and representation. <p>※ The NCS Quality Control Committee selects participating organizations.</p>	<ul style="list-style-type: none">• HRDK
	[Contract]	<ul style="list-style-type: none">• The HRDK signs a contract with selected organizations for NCS development and improvement	<ul style="list-style-type: none">• Development & Improvement Organization• HRDK

3) Develop & Improve NCS

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Steps 1-4



Steps 5-9



III.

National Competency Standards Applications

Applications of NCS

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Training Organizations

- Develop vocational training courses
- Develop teaching materials and curriculum
- Apply to training standards



Businesses

- Competency-based hiring
- Upskilling
- Hiring, posting, etc.



Qualification Testing Institutions

- Create and modify qualification items (National technical qualification, work-study qualification, etc.)
- Develop and revise exam criteria
- Test questions & methods



National Jobs Competency Standards

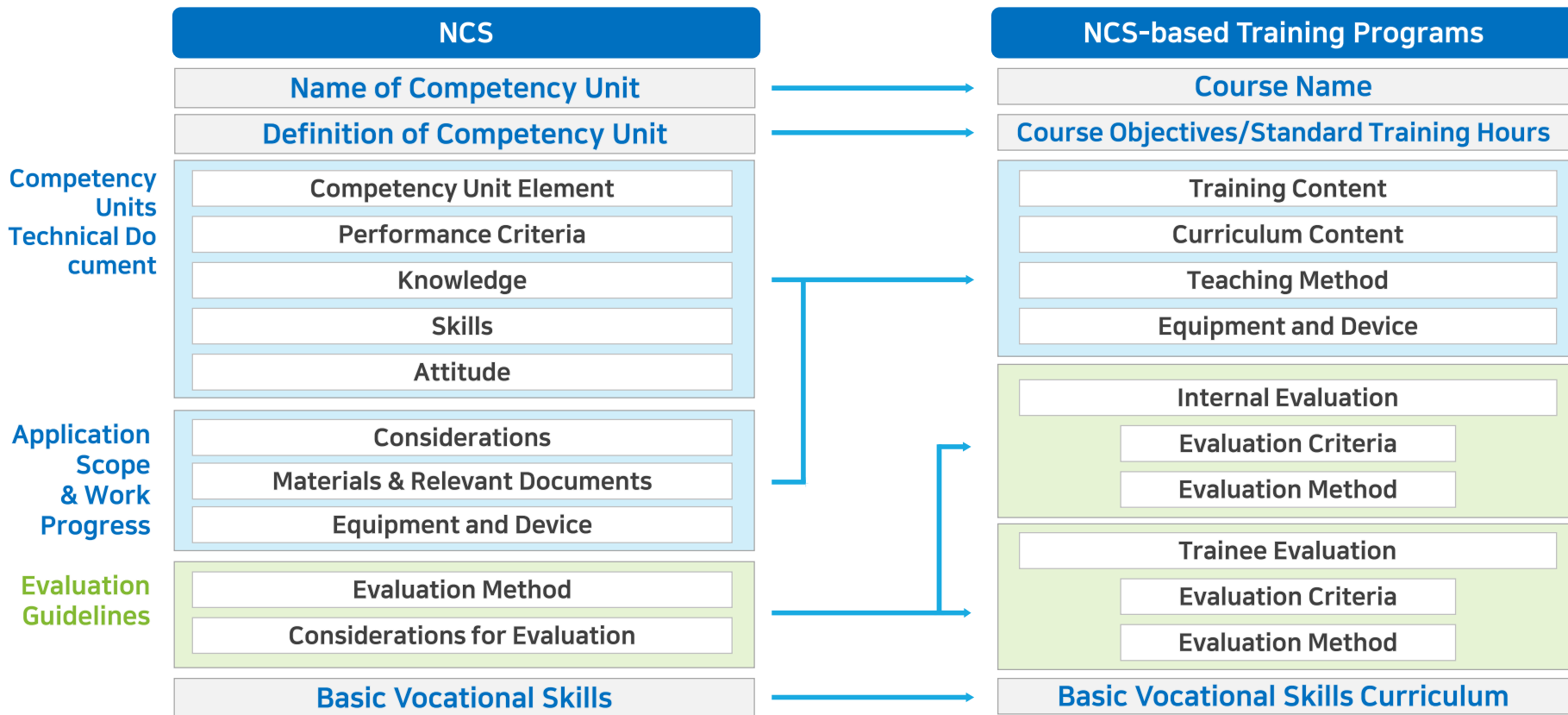
Employees

- Career development paths
- Self-diagnosis tools



Mandatory NCS-based Training Programs

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Examples of NCS-based Training Programs

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Overview of Training Programs

Name of Training Programs

• Room management

Training Period (Hours)

• March (300 hours)

Training Level

• Level 3

Training Subject

• New job seekers in the Room Management field
(language, interpersonal skills)

Training Objective

• Able to create the best room products by managing reservation check in and out, housekeeping, hotel laundry management for the convenient and pleasant stay of customers.



Examples of NCS-based Training Programs

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Training Program Overview

1. Course Training Hours

Total hours (%)	300 (100%)
NCS Knowledge Courses (%)	30 (10.0%)
NCS Major Courses (%)	180 (60.0%)
Non-NCS Courses (%)	90 (30.0%)

- NCS application rate is 60%
- When the total training hours are below 350, NCS knowledge courses are not recognized as NCS-applied courses.

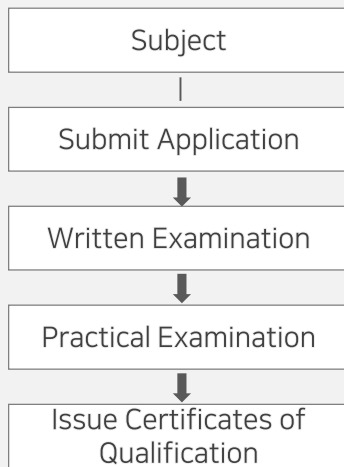
2. Course Composition

Type		Course Name	Training Hours	Training Instructor	Competency Unit Type No. Competency Unit Name (Chapter Name)	Training Hours	Notes
Total			300	-		300	
NCS Knowledge Course	Subtotal		30	-		30	
	Basic Vocational Skills		30	Soyang Kim	Communication Skills	15	
					Interpersonal Skills	15	
NCS Major Course	Subtotal		180	-		180	
	Practical Experience	Room Service	70	Gildong Hong	1203020201_13v1 Room Reservation	30	
					1203020202_13v1 Check-in	20	
					1203020206_13v1 Check-out	20	
		Customer Service	30	XXX	1203020508_13v1 Customer Service Center	30	
		Housekeeping Maintenance	30	XXX	1203020208_13v1 Housekeeping Maintenance	30	
		Hotel Laundry Management	20	XXX	1203020210_13v1 Hotel Laundry Management	20	
	Tour Product Recommendation	30	XXX	1203020202_13v1 Product Recommendation	30		
Non-NCS Major Course	Subtotal		90	-		90	
	Theory	Hotel Management	20	XXX	Overview of Room Management	10	
					Safety Management of Hotel Facilities	10	
		Marketing	25	XXX	Marketing 101	10	
					Marketing Theory of Attracting Customers	15	
	Practical Experience	Hotel Room Management	45	XXX	Bed Setting	20	
					Room Arrangements	25	

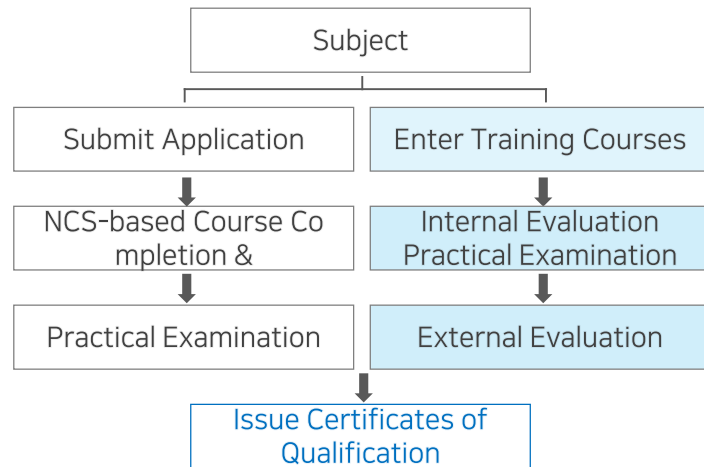
NCS-based National Technical Qualification

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Past (Qualification test type only)



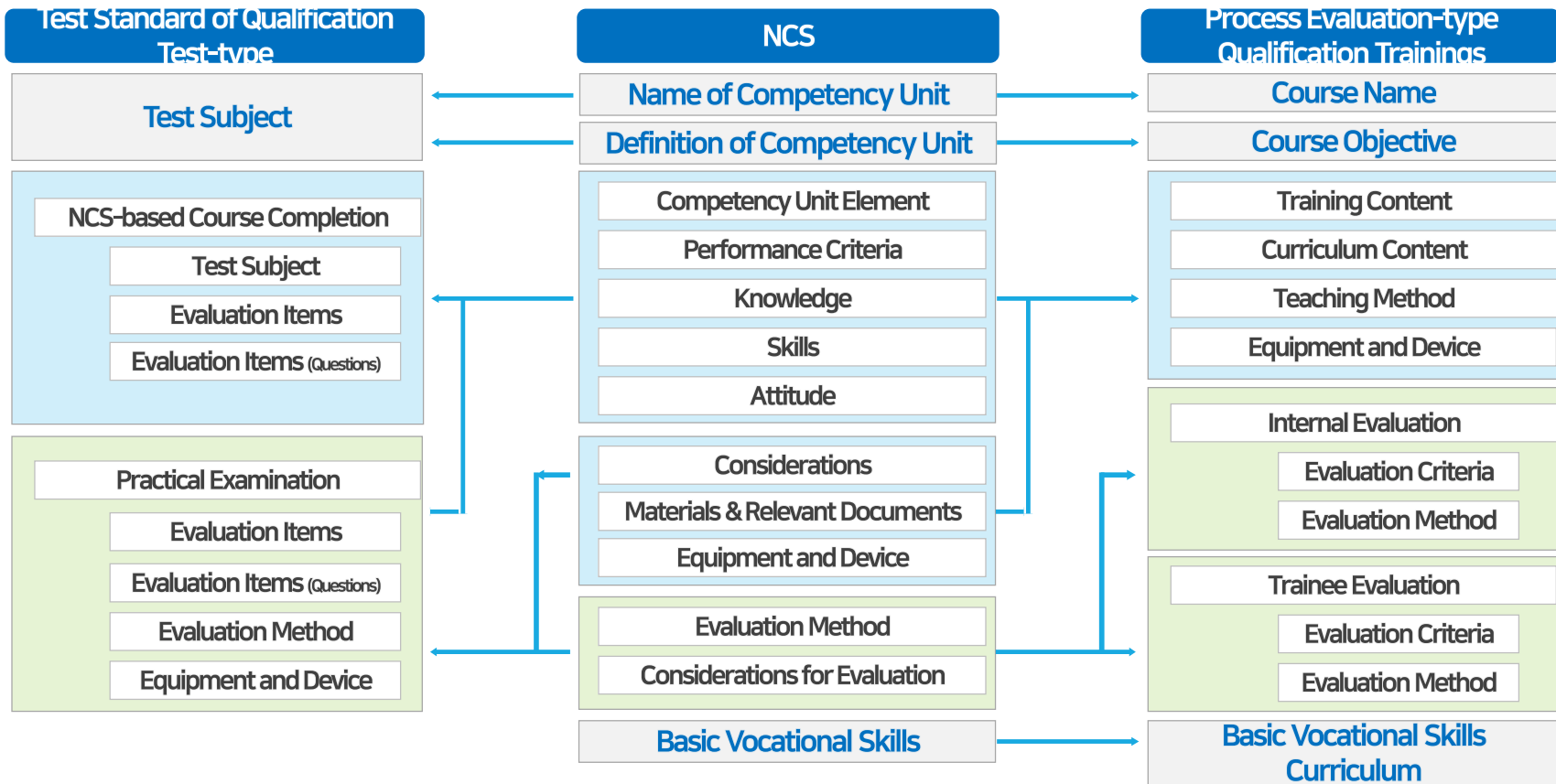
Current (Qualification test type, process evaluation type qualification)



* As of 2022, only 178 subjects of process evaluation type are in use out of 546 subjects

Design of NCS-based National Technical Qualification

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Support Consulting for Companies that Apply NCS

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- A government project to fund small to medium-sized companies to nurture core talent in recruitments and upskilling programs

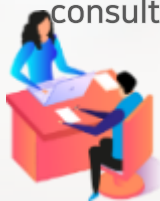
* As of 2022, expected to fund 460 companies per year

Type
01

Basic Type (Job analysis)

Job analysis and job redesign
for the entire company

Consulting and
consulting-related trainings



Type
02

Expanded Type (Recruitment/training applications)

Based on the job description,
identify capacity models and
provide consulting for recruit
ment and training



Type
03

Basic + Expanded (Job analysis + recruitment/training applications)

Basic consulting
+ expanded consulting





Thank you!

