THE FINNISH FEESCALES AND CIS/WIS

FEESCALE BEFORE 1990

- DEFINED BY THE FINNISH ASSOCIATION OF ARCHITECTS
- BASED ON EXPERIENCE
- WAS GENERALLY APPROVED
- fee was a %-scale matrix
- fees were defined by two parameters
  1. size of the project (construction costs)
  2. difficulty (based on the building type)
     - fee was %-share of construction costs

EXAMPLE: CLASS II

LUOKKA II

Asuinkerrostalot
Asuntolat
Erikoisvarastot
Huoltorakennukset
Huoltamot
Katsastusasemat
Kasarmit
Kerhorakennukset, vaatimattomat
Kone- ja liikennevälinesuojat, vaatimattomat
Konekorjaamot
Kurssi- ja leirikeskukset, vaatimattomat
Liikennevälinekorjaamot
Liikerakennukset, vaatimattomat
Loma-asunnot
oma- ja lepokodit
Lämpökeskukset
Maatalousrakennukset, vaativat
Matkustajakodit
Meijerit
Myllyt

BLOCK OF FLATS
DORMITORIES
SPECIAL WAREHOUSES
MAINTENACE BUILDINGS
SERVICE STATIONS
....

Myymälähallit
Pakastamot
Paloasemat
Pesulat
Pientalot, rivitalot, rakennejärjestelmiä soveltaen
Pienkirjastot
Pienmyymälärakennukset
Pienteollisuustalot
Postinkäsittelykeskukset
Pysäköintitalot, vaativat
Ruokalat
Siilot, vaativat
Tavaraliikenneasemat
Teletoimintakeskukset
Teollisuusrakennukset
Teurastamot
Toimistorakennukset, vaatimattomat
Toipilaskodit
Urheilurakennukset, vaatimattomat
Voima-asemat

EXAMPLE: COMPARABLE SCALE

SUOMEN RAKENNUTTAJALIITTO RY
SUOMEN ARKKITEHTILIITTO — FINLANDS ARKITEKTFORBUND RY
SUOMEN KONSULTTITOIMISTOJEN LIITTO SKOL RY

Arkkitehtitaksan palkkioprosenttitaulukko
Arvodesprocentstabell för arkitekttaxa

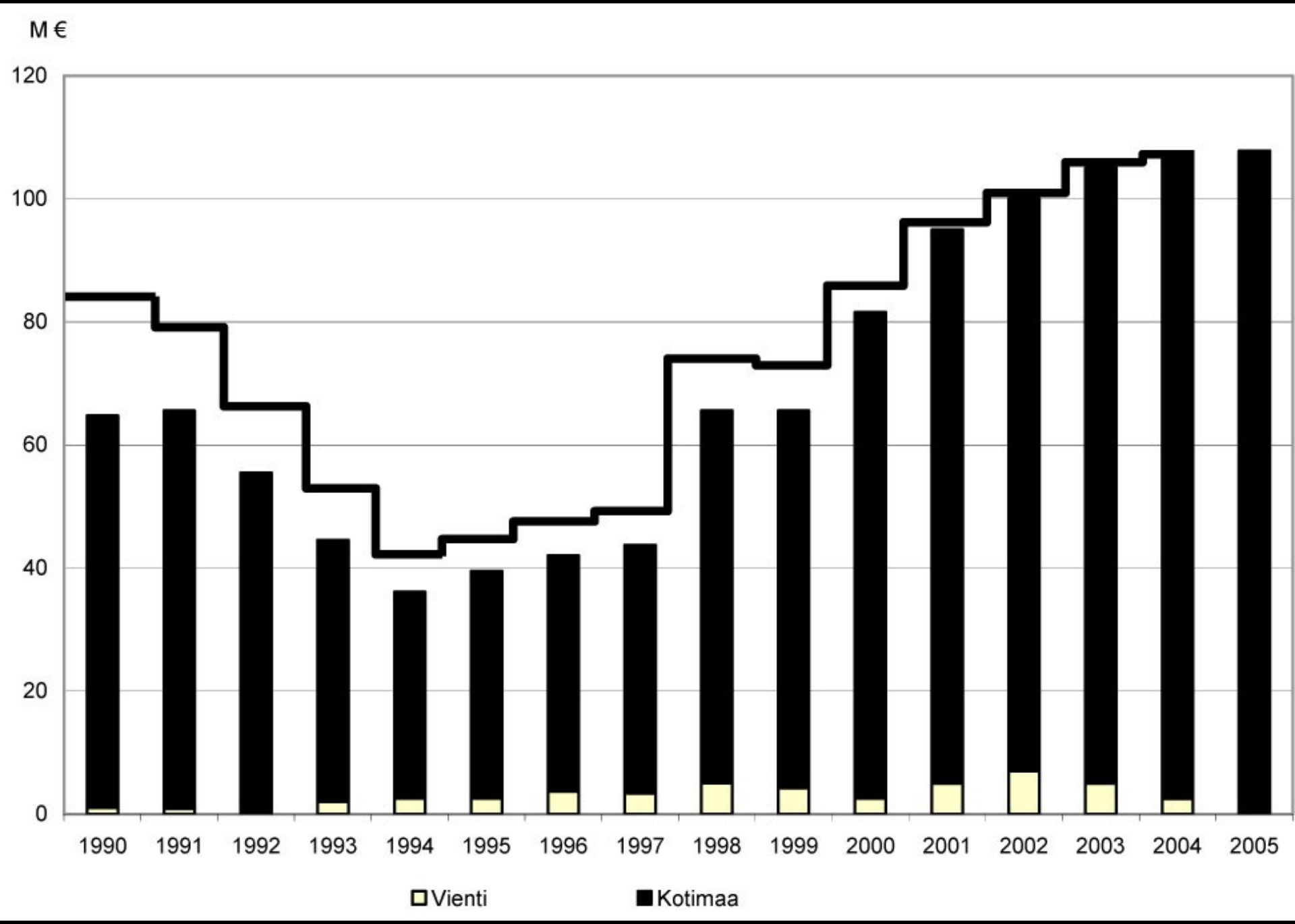
Voimassaoloaika 1. 6. 1990—31. 5. 1991
Giltighetstid 1. 6. 1990—31. 5. 1991

FOR A 600.000 FIM (100 000 EURO) II-CLASS BUILDING
THE FEE WAS 46080- 66900 FIM (7680-11150 EURO)

	VAATIVUUSLUOKKA					SVÅRIGHETSKLASS			
	⊢	I	+	II	+	III	+	IV	⊣
RAK.SUMMA MK BYGGN.SUMMA MK									
300.000 "	5.79	7.39	8.98	11.01	13.04	15.21	17.38	19.99	22.60
400.000 "	5.43	6.92	8.41	10.31	12.21	14.25	16.28	18.72	21.17
500.000 "	5.14	6.56	7.97	9.77	11.57	13.50	15.43	17.74	20.06
600.000 "	4.96	6.32	7.68	9.41	11.15	13.01	14.87	17.10	19.32
700.000 "	4.78	6.09	7.40	9.07	10.75	12.54	14.33	16.48	18.63
800.000 "	4.66	5.94	7.22	8.86	10.49	12.24	13.98	16.08	18.18
900.000 "	4.57	5.83	7.09	8.69	10.29	12.01	13.72	15.78	17.84
1.00 milj	4.46	5.68	6.91	8.47	10.03	11.70	13.37	15.37	17.38
1.25 "	4.23	5.39	6.55	8.03	9.51	11.10	12.68	14.59	16.49

THE END OF THE FEESCALE

- WAS BANNED BY NATIONAL COMPETITION AUTHORITIES IN 1990
- BANNING WITH SEVERE ECONOMIC CRISIS AND CAD LED INTO MASS UNEMPLOYMENT OF ARCHITECTS (~50% UNEMPLOYED)
- THE REVENUE OF THE OFFICES COLLAPSED


M €
120
100
80
60
40
20
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
Vienti
Kotimaa

AFTER 1990

- WORK INPUT SURVEY (WIS)
- AT FIRST COST BASED SURVEY
  1. THE VALUE OF THE CONTRACT
  2. SIZE AND CLASS OF THE PROJECT
  3. AVERAGE HOURLY RATES
     - CALCULATED WORK INPUT
     - PUBLISHED AS A PRINTED TABLE
  4. [CONSTRUCTION COSTS FOR COMPARISON TO THE OLD FEESCALE]

DATA IN EARLY WIS

- TYPE OF THE PROJECT
- SIZE OF THE PROJECT
- OTHER DATA, LOCATION ETC...
- VALUE OF THE DESIGN CONTRACT (VDC) = FEE
- CONSTRUCTION COSTS FOR COMPARISON
  - VDC CONVERTED TO HOURS WITH AVERAGE HOURLY RATE

PROBLEMS WITH EARLY CIS

- VALUE OF THE DESIGN CONTRACT
  - OFTEN REGARDED AS A TRADE SECRET
    - VERY HARD TO GET ECONOMIC INFORMATION FROM THE OFFICES
- VDC DOES NOT DESCRIBE THE EFFORT NEEDED IN A PROJECT
    - VDC CAN BE INSUFFICIENT DUE TO VARIOUS REASONS

PROBLEMS WITH SURVEYS

- CLASSIFICATION OF PROJECTS
  - TYPE OF THE PROJECT
    - ACCORDING TO BUILDING TYPE?
      - HOUSING
      - OFFICE BUILDING
      - INDUSTRIAL BUILDING
      - ...
    - ACCORDING TO CLASS OF DIFFICULTY?
      - EASY
      - INTERMEDIATE
      - DIFFICULT
      - ...

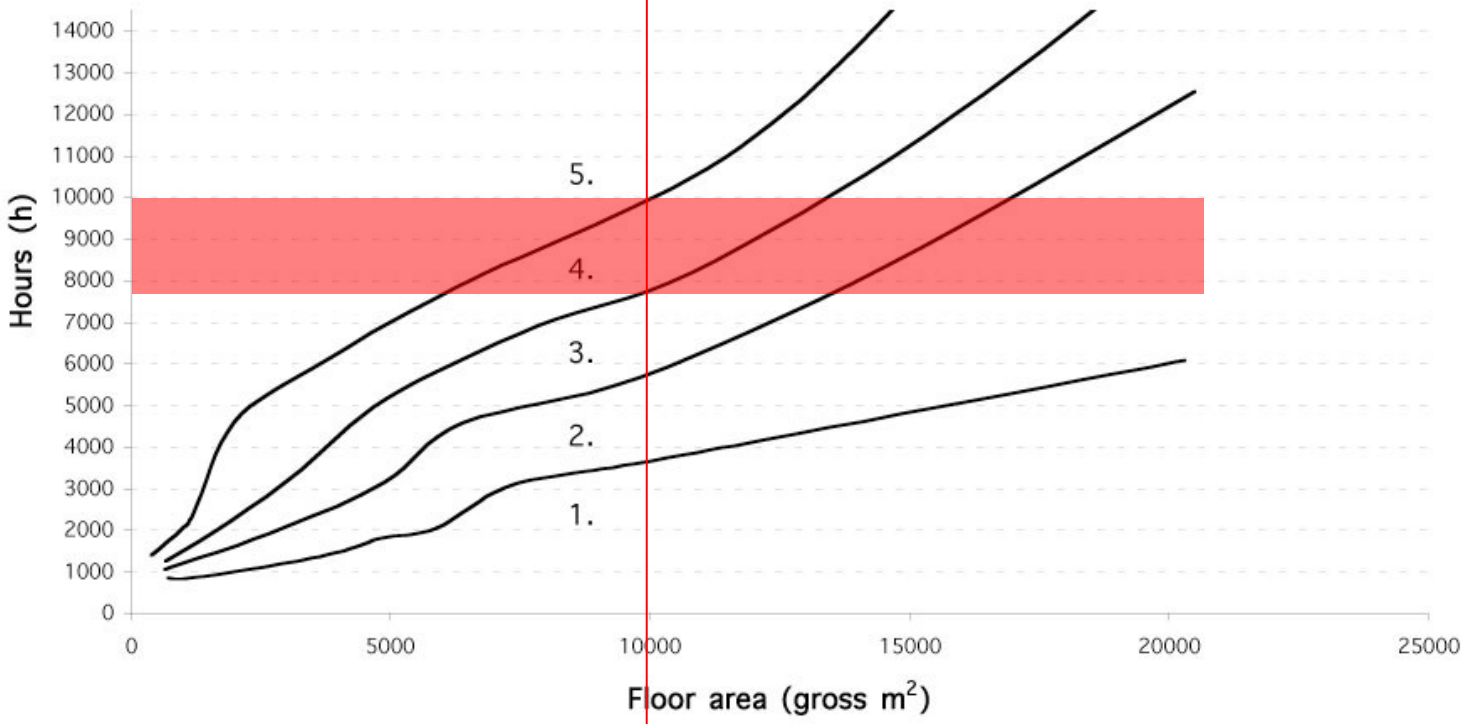
THE CURRENT WIS

FINNISH WIS

- WIS IS MAINTAINED BY ATL AND SAFA
- WIS IS NOT COMPELLING
  - **NOT ALL CLIENTS WANT TO FOLLOW THE WIS DUE TO VARIOUS REASONS**
- OTHER WAYS TO DEFINE FEES COEXIST
  - % OF CONSTRUCTION COSTS, €/m2...

WORK INPUT IN ARCHITECTURAL DESIGN

in AA and A class building projects adhering to RakMK A2 *



Average distribution of competence as per the personnel classification of SKOL:

E	-
01	3%
02	20%
03	28%
04	23%
05	20%
06	6%
07	-

The competence level of the human resources involved in the design work varies from one project to the next.

Group 5. – Highly demanding design tasks

This group includes exceptional, highly demanding projects, in which the work input in relation to the scope of the project is exceptionally high, for example, conference and performance facilities, official premises, museums, demanding health care facilities.

The project site is in an exceptionally demanding environment. The project is technically and architecturally challenging and the townscape or landscape set special standards for the required expertise. The design process is difficult to predict. The initial data on the project is often inadequate or the process is for some other reason difficult to predict.

A renovation of an infill project requires research into the historical aspect or building protection aspect, restoration or demanding alteration and very extensive structural refurbishment and renovation of the heating, ventilation, plumbing and electrical systems.

Group 4. – Demanding design tasks

The group includes family houses, service housing, rehabilitation centres, health care facilities, demanding blocks of flats, schools, and day care centres, universities and laboratories.

The project site is in a demanding environment; for example, cultural landscape, densely built community, city centre, protected building or milieu, historical or architecturally valuable building, shoreline location. The project requires planning amendments, or the planning situation is unclear. The project has a demanding functional or architectural target level, it is a public building or otherwise requires that particular attention is paid to the public image. The size of the building is large or it is tall and reaches above the tree top level, thus being visible from afar. The planning process is complicated, the number of parties involved is large and the decision-making and implementation takes place in several stages. There are uncertainties in the initial project data.

A renovation and infill construction project requires consideration of issues related to building protection, functional alterations or extensive structural refurbishment and renovation of the heating, ventilation, plumbing and electrical systems.

SCOPES OF WORK

- PUBLISHED IN FINLAND AS A TASK LISTS FOR EACH CONSULTANT
  - PREPARED BY THE MEMBERS OF THE PROFESSION
  - PUBLISHED BY THE RAKENNUSTIETO (BUILDING INFORMATION)
  - FOR EXAMPLE: "ARK 95 Arkkitehtisuunnittelun tehtäväluettelo RT 10-10576"

FINNISH WIS 2005 –

- FEW ALTERATIONS WERE MADE
  - NO FINANCIAL DATA ABOUT THE DESIGN CONTRACT IS COLLECTED
  - **WORK INPUT IS DEFINED AS:**
    - *THE TOTAL AMOUNT OF WORK NEEDED TO COMPLETE A PROJECT*
  - **WORK INPUT IS NOT**
    - *THE INVOICED HOURS*
  - DATA IS COLLECTED ONLINE 24/7/365

FINNIS WIS 2005-

- WORK INPUT IS NOT REGARDED AS TRADE SECRET
  - WORK INPUT INFORMATION IS MUCH EASIER TO GET
- TEACHES OFFICES TO MONITOR
  - OWN ACTIVITY, EFFECTIVENESS
  - PROJECT KEY FIGURES IN RELATION TO THE WORK INPUT
- TECHNICALLY WITHOUT PROBLEMS

THE DATABASE

DATABASE STRUCTURE

- LOGICAL SQL-DATABASE STRUCTURE
- FOR EXAMPLE
  - COMPANIES BELONG TO INDIVIDUALS (PARTNERS)
  - PROJECTS BELONG TO COMPANIES
  - HOURS, AREAS, LOCATIONS ETC. RELATE TO PROJECTS
  - AND SO ON...

DATABASE STRUCTURE

- 6 TYPES OF CONSULTING ASSIGNMENTS
- 11 MAIN BUILDING TYPES
- 32 SUB BUILDING TYPES
- 5 TASK DIFFICULTY CATEGORIES, GROUPED IN THREE CLUSTERS
  - *THE DATABASE STRUCTURE IS TO BE MODIFIED ACCORDING TO THE USER FEEDBACK*

CURRENT DATA

- SITUATION 03.06.2009
- 2865 PROJECTS
- OUT FILTERED PROJECTS:
  - UNDER 6 MONTHS AND OVER 6 YEARS OLD PROJECTS, ATYPICAL PROJECTS
  - AROUND 1100 ARE USED IN ANALYSES
- GOAL IS TO CREATE 5 YEARS "ROLLING FOLLOW-UP" STATISTICS

ONLINE FEEDBACK

- REQUIRES LOGIN
- PROVIDED ONLY TO THE OFFICES THAT CONTRIBUTE TO THE CONSTRUCTION OF THE DATABASE
- IS ACCESSIBLE ANYTIME, ANYWHERE, IS ALWAYS UP-TO-DATE
- RETURNS ESTIMATION OF A WORK INPUT NEEDED FOR SPECIFIED PROJECT

ONLINE FEEDBACK EXAMPLE

- PARAMETERS:
  - ALL CONSULTING ASSIGNMENTS
  - ONLY NEW CONSTRUCTION
  - ALL BUILDING TYPES
  - DIFFICULTY CATEGORY 3
  - SIZE 2000-3000 sqm GROSS AREA
- **RESULT IS NOT ACCURATE**
  - INCLUDES CASES FROM PROJECT PLANS TO BUILDING DESIGNS

Haku

Haun tulokset - Arkkitehtitoimistojen liitto ATL ry

Hakuehdot:

Suunnittelutehtava: Hae kaikista
Uudis/Lisä/Korjaus: Uudisrakentaminen
Rakennustyyppi: Hae kaikista
Tarkenne: -
Vaativuusluokka: 3
Pienin koko: 2000brm^2
Suurin koko: 3000brm^2

Haun tulokset - Arkkitehtitsuunnittelu:

Projekteja: 16 — AMOUNT OF PROJECTS THAT FIT TO THE PARAMETERS
Työmäärä keskiarvo: 1887.4 tuntia. — WORK INPUT AVERAGE
Pienin työmäärä: 636 tuntia. — MINIMUM WORK INPUT
Suurin työmäärä: 4793 tuntia. — MAXIMUM WORK INPUT
Alojen keskiarvo: 2497.9 brm^2. — THE AVERAGE AREA OF PROJECTS
tuntia/brm^2: 0.76 — AVERAGE HOURS/GROSS AREA

SKOL:n luokittelun mukaan: — HOURS DIVIDED ACCORDING TO THE GENERAL DIVISION OF THE COMPETENCE LEVEL (INFORMATION PROVIDED BY SKOL)

E: -
01: 56.6
02: 377.5
03: 528.5
04: 434.1
05: 377.5
06: 113.2
07: -

ABOUT THE WIS

- WIS IS A MEAN TO DEFINE SUFFICIENT DESIGN RESOURCES
- WIS IS A WAY TO DEFINE COMPENSATION
- USING THE WIS DOES NOT MEAN THAT THE INVOICING IS DONE ON HOURLY BASIS
  - INVOICING PRINCIPLE IS A MATTER OF AGREEMENT

IN THE LONG TERM

- WHEN WIS IS USED TO DEFINE RESOURCES
  - IF THE SCOPE OF WORK BROADENS, THE WORK INPUT RISES AND VICE VERSA
  - IF THE PROJECTS WILL INCLUDE MORE TASKS IN GENERAL, THE WORK INPUT WILL RISE

PUBLISHING

- ANALYSIS CAN BE PUBLISHED IN PRINTED FORM
- CURVES ARE EASILY UNDERSTANDABLE FOR ALL

FOR WHO?

FOR CLIENTS

- A TOOL TO MAKE ESTIMATIONS ON THE COST OF ARCHITECTURAL SERVICES
- A TOOL TO ESTIMATE THE QUALITY OF AN OFFER
  - IN GENERAL; THE MORE WORK IS PUT IN A PROJECT THE BETTER THE THINGS CAN BE DONE

FOR AUTHORITIES

- FOR EXAMPLE NATIONALLY IN FINLAND:
  - BY LAW IN FINLAND THE PRINCIPAL DESIGNER HAS TO VERIFY SUFFICIENT DESIGN RESOURCES OF ALL CONSULTANTS WITH THE CLIENT
- WIS IS A GUIDELINE TO CHECK SUFFICIENT RESOURCES

FOR ARCHITECTS

- DO ARCHITECTS REALLY KNOW THE BASE OF THEIR FEES?
- MONITORING ONE'S OWN WORK TEACHES ALOT
- WIS IS A SOLID ARGUMENT FOR SUFFICIENT FEES:
  - TAKING CARE OF CLIENTS RESOURCES (BUILDING, MONEY...) NEEDS TIME
  - THE MORE TIME, THE BETTER

INTERNATIONAL CIS/WIS?

- IS IT POSSIBLE TO MAKE DIFFERENT CIS'S/WIS'S COMPARABLE?
  - COMMON CONCEPTS OF THE CONSTRUCTION PROCESS ARE NEEDED
  - COMMON BREAK DOWN OF THE PHASES OF THE CONSTRUCTION PROCESS IS NEEDED
  - COMPARISON BY CALCULATION