



行政院環境保護署

Environmental Protection Administration
Executive Yuan, R.O.C.

The newly amended Noise Control Standard in Taiwan



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inter-noise 2007 istanbul

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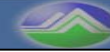
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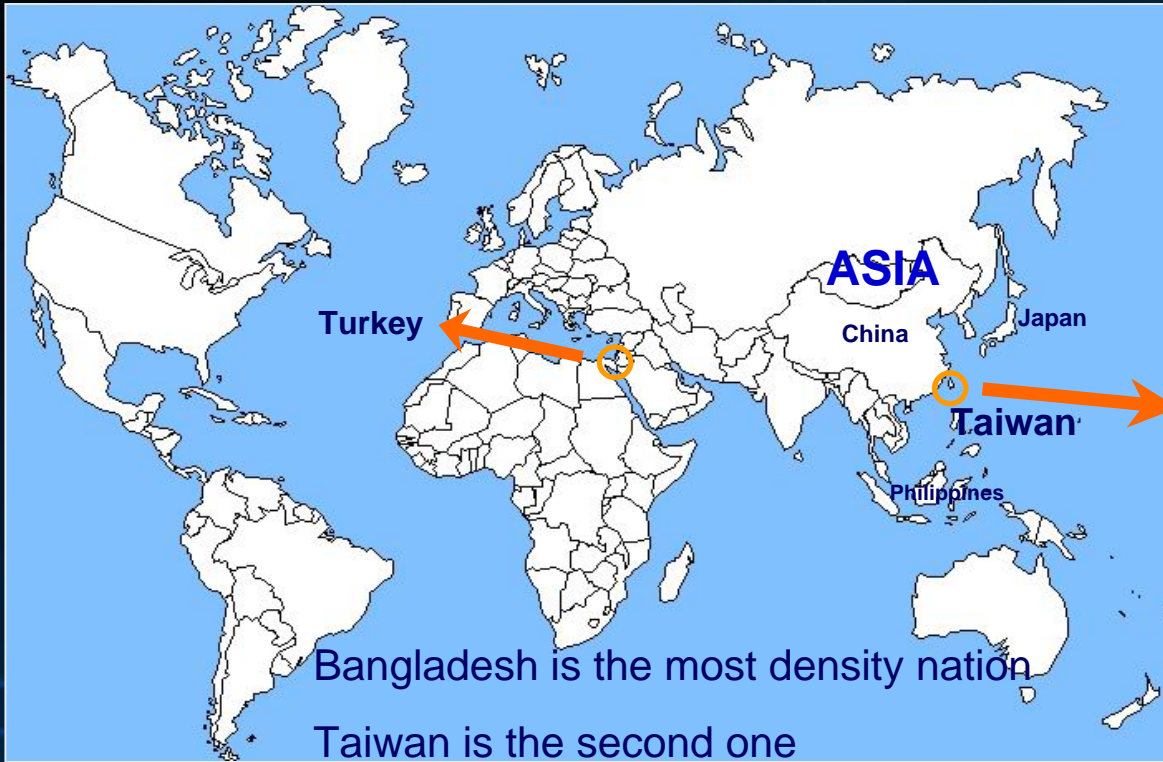
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Amended Articles

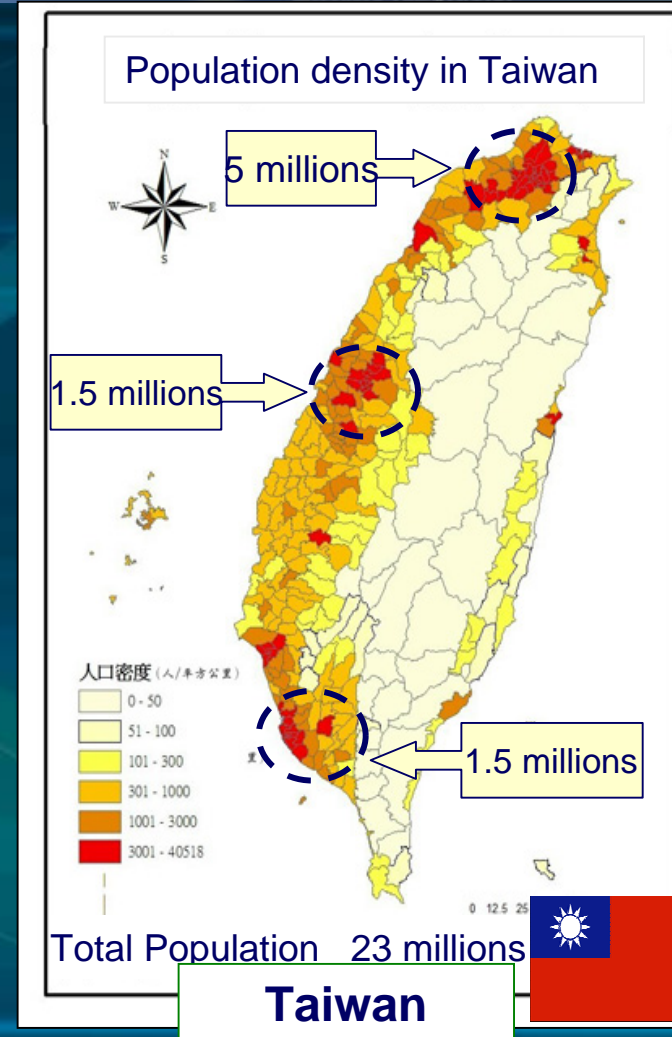
1. Introduction



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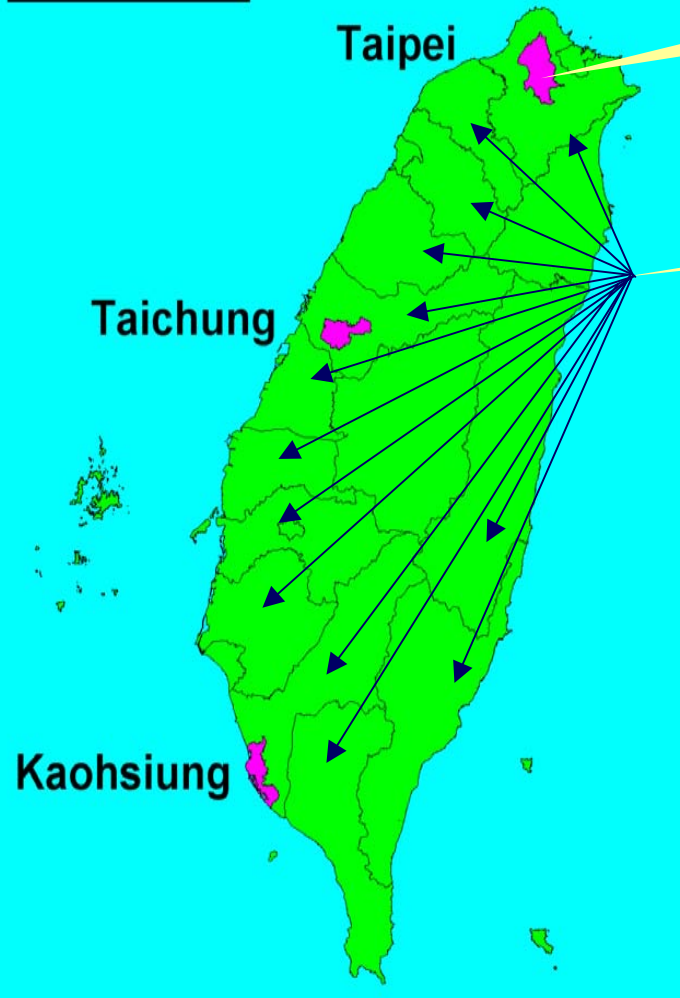
- Area : 36,000 km²
- Population: 23 millions
- Population density:
All over: 625/km²; Taipei City: 9,864/km²



1. Introduction



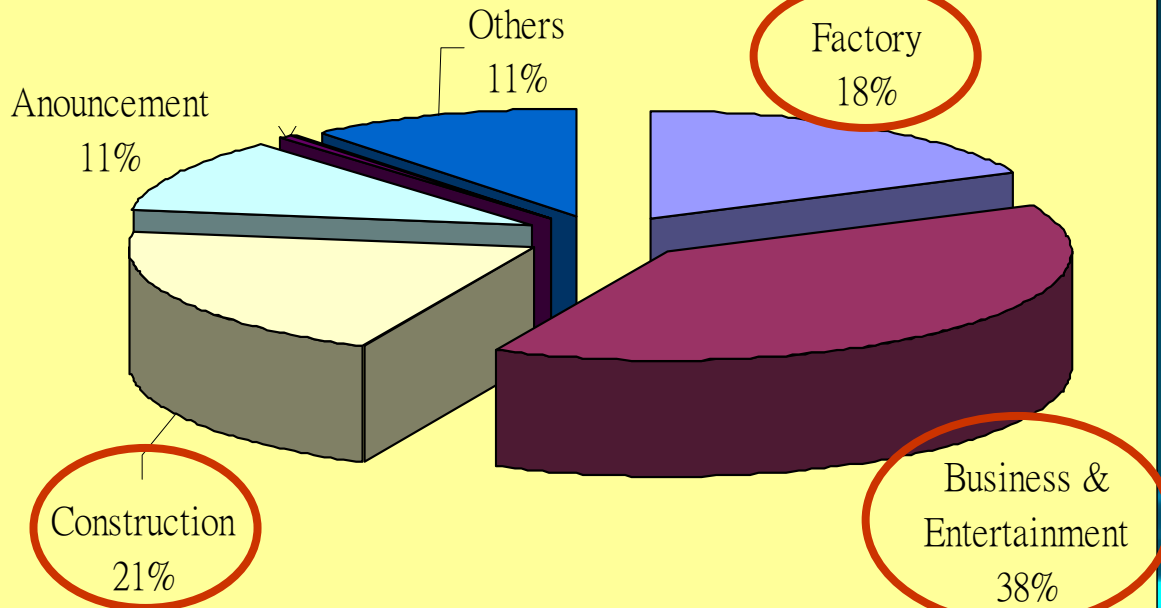
Taiwan



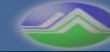
Central authority : EPA

Local Government: 25EPBs

2001~2006 Noise Petition Statistic



1. Introduction



- The noise control efforts began as early as 1983 with the promulgation of the Noise Control Act, last amended on Jan 8, 2003.
- In 1992, the EPA announced the Noise Control Standard.
- The noise emitted from factories, business places, entertainment establishments, construction sites, public announcement facilities, Others shall not exceed the Noise Control Standard within each noise control zones.

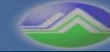
1. Introduction



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1. Introduction



–Noise Control Zone

- Noise Control Zones are designated by local governments (EPB).
- **Class 1:** For the areas which need very quite environment
- **Class 2:** The areas which for residential use mainly
- **Class 3:** Residential and commercial areas mixed or residential and industrial areas mixed
- **Class 4:** Industrial areas



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Introduction

Noise complaint
Cases situations

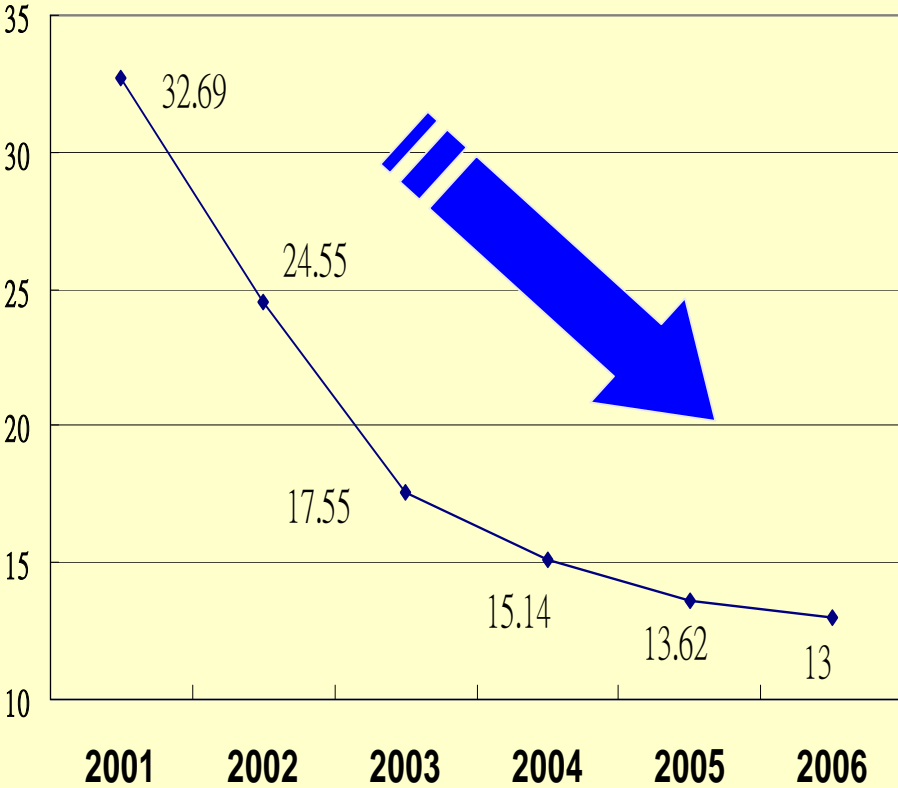
contents

2. Noise complaint Cases situations



Number of complaints

%



Number

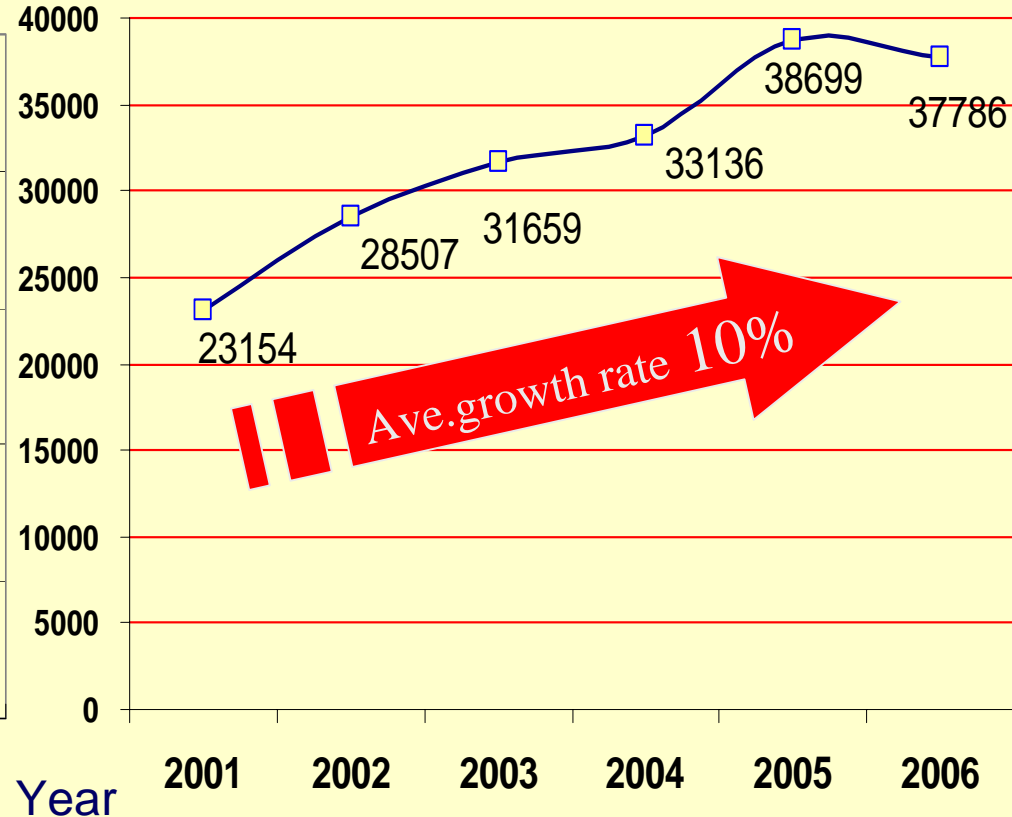
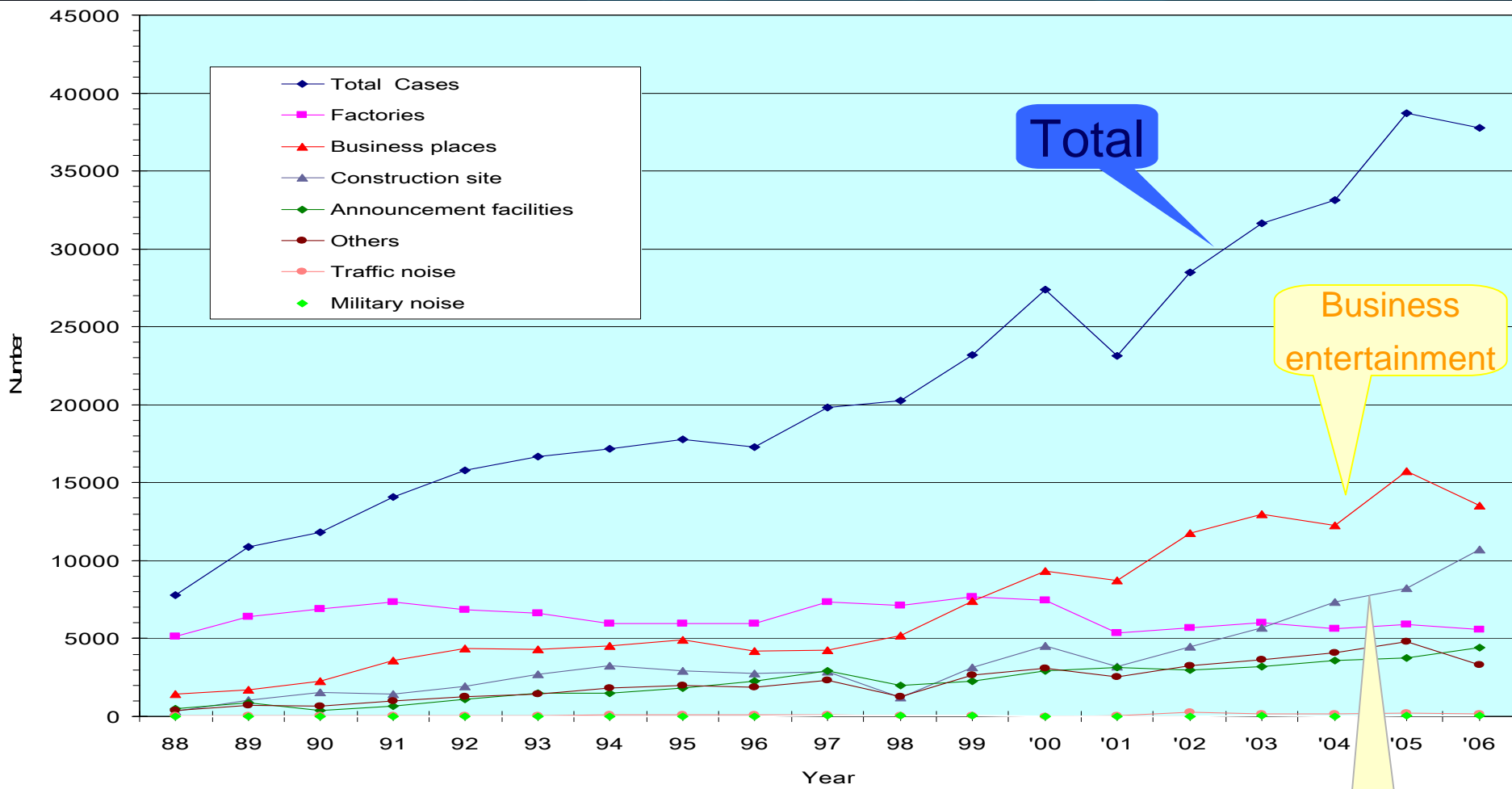


Figure : Environmental unqualified percentage V.S. Number of noise complaint from 2001 to 2006

2. Noise complaint Cases situations



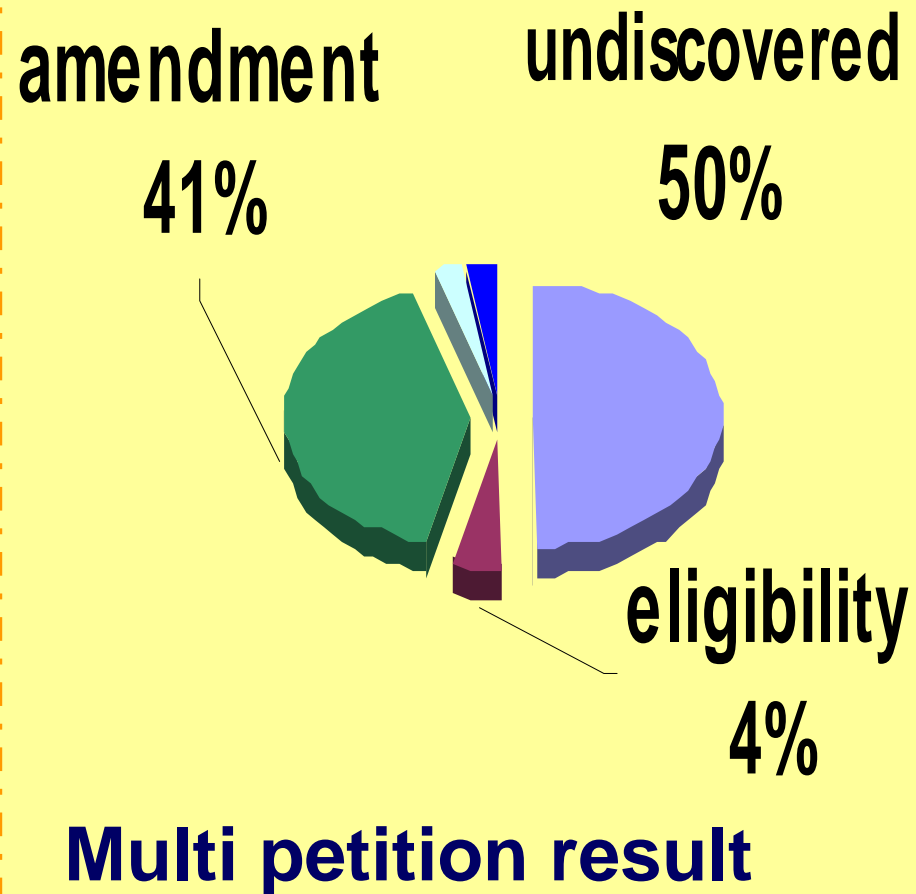
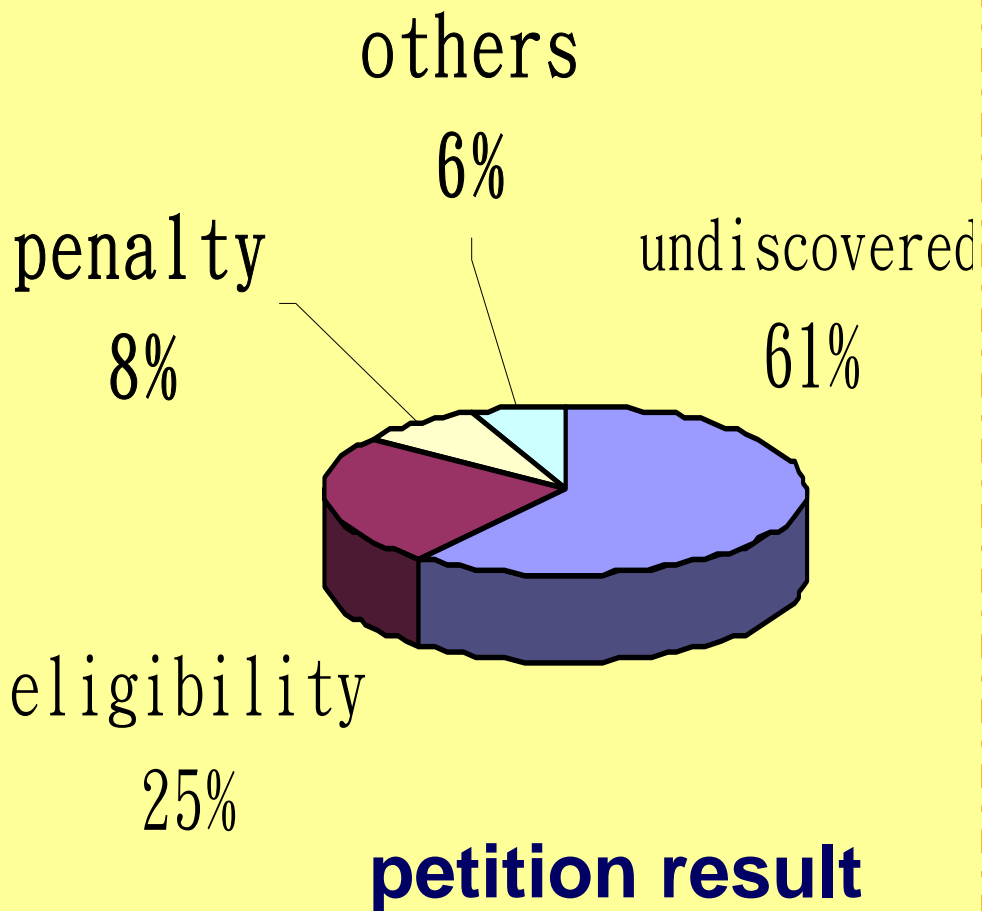
Noise sources



2. Noise complaint Cases situations



Petition result comparison





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Amended
articles

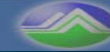
3. Amended articles



Based on the noise complaint cases, the low-frequency noise criteria for business places and entertainment establishments was set in 2005. Immediately following that was the amendment for Noise Control Standard in 2008 for factories also the following items.

- Time intervals
- Instrumentation
- Period of observation
- Measurement position
- Evaluation method

3. Amended articles



● Measurement Position

- Measurement shall be made at any place outside the surrounding boundaries of a factories, business and entertainment place, or at the living place designated by the applicant concerned.
- It needs to inside the building if the low-frequency noise measured.

3. Amended articles



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3. Amended articles



● Evaluation Method

- Based on the following sound characteristics to calculate the L_{eq} or L_{max} , the results shall not exceed the values shown in the table.
- If the peak of noise read from sound level meter displays regularly at periodic or intermittent cycles with the maximum value approximately the same, take the average of the L_{max} in five consecutive readings.
- Other situations shall be expressed by L_{eq} . Sampling time shall be more than **2** consecutive minutes and the sampling time interval shall not exceed 2 seconds.

3. Amended articles



➤ Business places and entertainment establishments noise control standards

dB(A) 20-200Hz

● Low frequency noise

$$L_{eq,LF} = 10 \times \log \sum_{n=20Hz}^{200Hz} 10^{0.1 \times L_{eq,n}}$$

Noise Control Zone	Day 06:00-20:00	Evening 20:00-22:00	Night 22:00-06:00
Class 1	35	35	30
Class 2	40	35	30
Class 3 & 4	40	40	35

3. Amended articles



➤ Factories noise control standards

● Low frequency noise

$$L_{eq,LF} = 10 \times \log \sum_{n=20Hz}^{200Hz} 10^{0.1 \times L_{eq,n}}$$

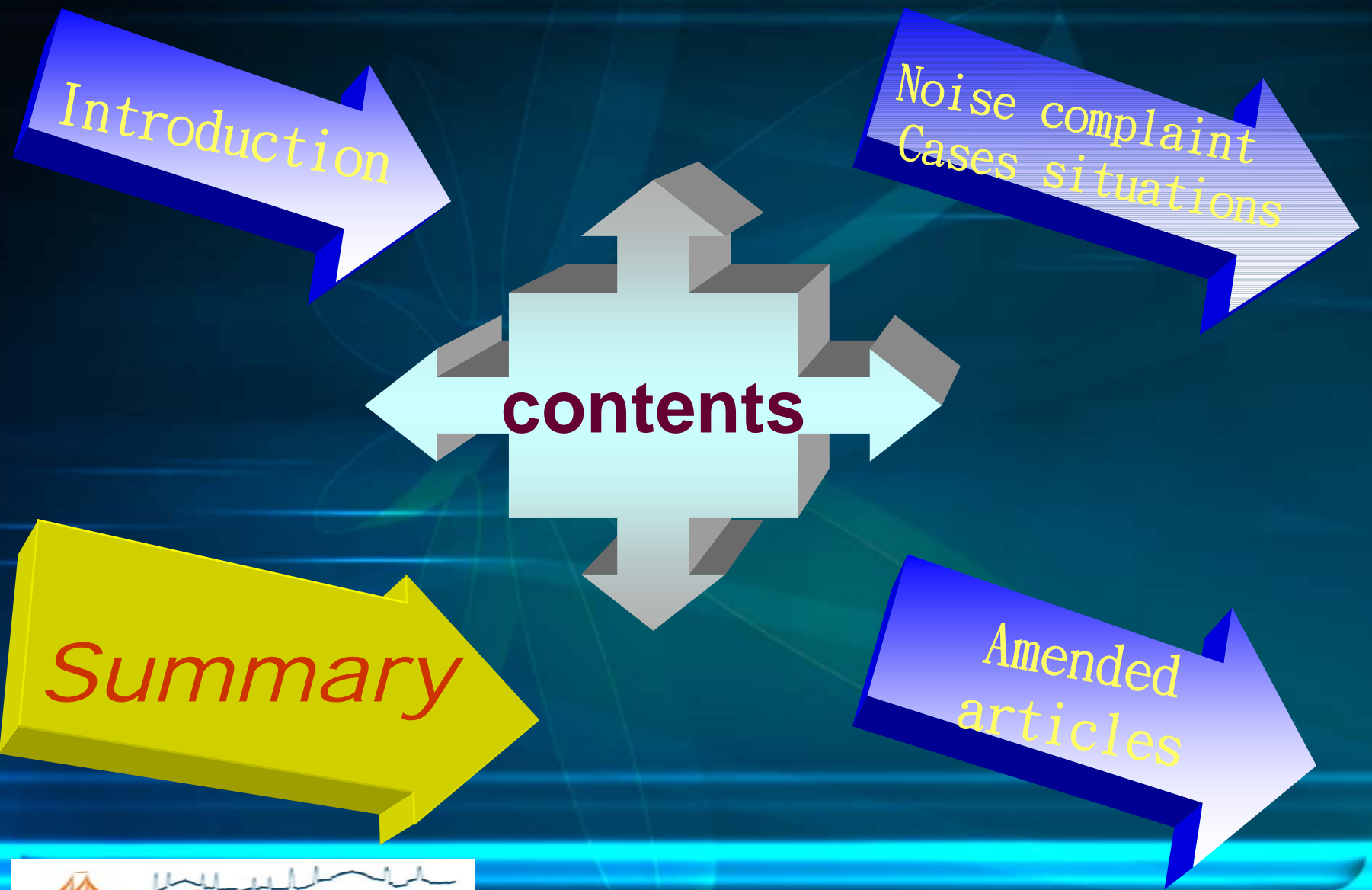
dB(A) 20-200Hz

Noise Control Zone	Day 06:00-20:00	Evening 20:00-22:00	Night 22:00-06:00
Class 1 & 2	42	42	39
Class 3 & 4	47	47	44



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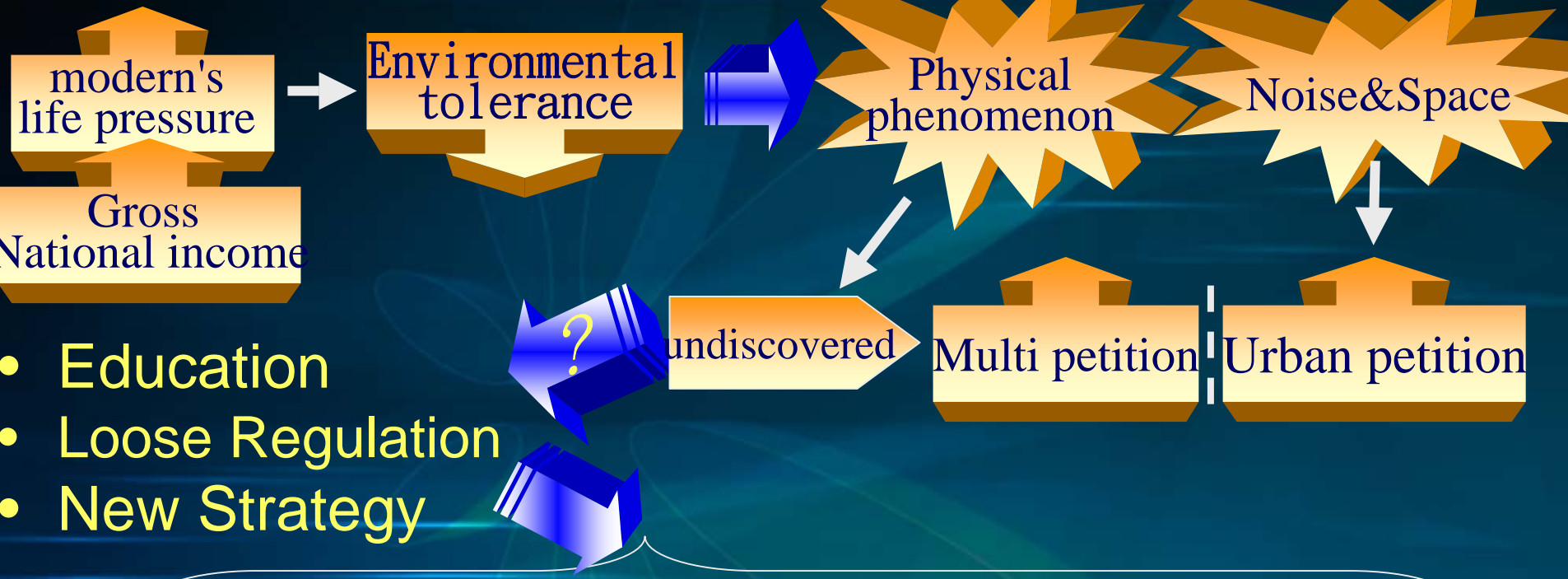
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4. Summary

- Sociology
- psychology

- Physics



- Education
- Loose Regulation
- New Strategy

Regulation Amendment

Education&Consult Platform

Noise control Act
Noise control Standard

Detection technique
Consult、Lawsuit(psychology)



4. Summary



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The End

Thanks for your attention



Blue skies and green earth

Verdant mountains and pristine water

Environmentally conscious citizenry

Sustainable homeland

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