

What is the Zero Accident Campaign (ZAC)?

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- ✓ Refers to a series of activities wherein the employer makes a promotion plan before proclaiming --
- ✓ the commencement of ZAC to achieve certain goals of the ZAC period
- ✓ depending on the business type and scale; all employees may voluntarily take part
- ✓ in the safety management policy for its promotion; and such
 achievement of certain goals
- ✓ as supported by the Korea Occupational Safety and Health Agency (KOSHA)
- ✓ with the required resources for policy promotion, if applicable, should
 be confirmed and certified by KOSHA.

Steps to the Course

1	Overview and Promotional Course of ZAC
2	Operational Practices and Issues of ZAC
3	Ways of Improvement and Revision of Regulations
4	Comments on the Revised Regulations of ZAC
5	How to Set a New Zero Accident Goal
6	Creation of a ZA Working Environment
7	Questions and Answers (Q&A)



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1-1. Settings and Purposes of Promotion

Comments on the Zero Accident Campaign (ZAC) Regulations

ZAC is based on the ideal of respect for human dignity;

It involves the collective participation

of both employed promote the industrial accident (IA) prevention campaign autonomously.

Ultimately, it seeks to inspire them with safety awareness and root out any kind of industrial accident (IA) for the creation of a dynamic, safe working environment with humanity.

(in effect since Sep. 1, 1979)



1-2. 3 Major Principles of ZAC



Shun passive mindset based on satisfaction with avoiding fatal accidents or holiday accidents and detect and eliminate potential risk factors proactively.



Set the ultimate goal of creating a safe working environment - Detect and eliminate potential risk factors before taking action.



For the detection and elimination of potential risk factors involved in works, motivate all personnel to make collaborative efforts to resolve problems proactively at their locations.



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1-3. Promotional Course

Comments on the Zero Accident Campaign (ZAC) Regulations

Sep. 1, 1979

Started ZAC according to the guidelines published by the Ministry of Labor

1980

 Introduced a diagrammatic training technique for risk prediction (set a benchmark on Japanese models)

Oct. 1, 1989

- Established the Korea Occupational Safety and Health Agency (KOSHA)
- Took control of some Zero Accident (ZA) works transferred from the Ministry of Labor

Aug. 21, 1992 ~ Aug. 30, 1993 Developed 10-Million Signature Campaign to expand ZAC into whole nation (joined by a total of 10,097,609 persons including President, Prime Minister, Department Ministers, religious representatives, and celebrities)

Jul. 1, 1997

 Took complete control of ZAC works transferred by the Ministry of Labor (to KOSHA)



1-4. Legal Grounds

Occupational Safety and Health Act (OSH Act)

Article 4. Government Duties (Section 1.5) and Article 65, Section 2.1 Promote PR/education and ZAC for inspiring all personnel with safety and health awareness

Enforcement Decree of OSH Act

Article 3-4 Promotion of ZAC (Section 1. Policy Consideration) and Article 47, Section 2

- 1. Expand ZAC and disseminate promotion techniques into every corner of the workplace.
- 2. Crank up ZAC including support for workplaces that successfully achieved their goals.

Regulati ons Regulations on the Promotion and Operation of ZAC for the Workplace (KOSHA)

Notification: Enforcement Regulation on ZAC for the Workplace (No. 2003-16) – abolished in September 2009



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2. Operational Practices and Issues of Zero Accident (ZA) Certification

- ▶ Significant changes in the industrial environment owing to the development of industrial technologies and machinery/facilities (especially in the construction industry)
 - Lacking in statistical basis, rationality, and feasibility of standards set for the ZA Certification goals
- ▶ Poor results of certification compared to the participation of large-scale business
 - 63% (2,378 workplaces) of all large-scale workplaces with more than 300 employees join ZAC, but they are not fully motivated due to the demanding certification process.

< Workplaces certified in ZAC: Aug. 1979 ~ Dec. 2008 >

Total	Less than 50 employees	50 to 99 employees	100 to 299 employees	300 to 999 employees	More than 1,000 employees
13,170	4,487	3,403	3,848	1,265	219
Share	33.9%	25.7%	29.1%	9.6%	1.7%

Potential factors on poor business certification

- ♦ Irrational standards for the goals of large-scale workplaces with regard to ZA Certification
- Demanding standards set for the goals of large-scale workplaces with regard to ZA Certification compared to those of small-scale ones
- (e.g., in the mechanical system manufacturing industry, the probability of large-scale workplaces having more than 1,000 employees to achieve certification goals is only 1/27 of that of small-scale workplaces with 50 employees.)
- ⇒ That is why large-scale workplaces have higher tendency to avoid joining ZAC.



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2-2. Campaign Participation and Biased Certification in Each Business Type

Comments on the Zero Accident Campaign (ZAC) Regulations

- Lowest Certification Rate in the Manufacturing Industry
- The manufacturing industry's certification rate is only 14.7%, which is the lowest level among all industries.
- In particular, small-sized manufacturing workplaces (with less than 50 employees) tend to show poor certification rate due to their weak basis of safety management.
 - Certification rate of small-sized manufacturing workplaces with less than 50 employees: 8.9% (2,712 out of a total of 30,336 workplaces)

<Certification of workplaces participating in ZAC: Aug. 1979 ~ Dec. 2008>

Items	Total	Manufacturing	Electricity, gas, and water supply	Construction	Transport, warehousing, and communication	Other business types
Participation in ZAC	61,594	37,705	480	18,804	1,466	3,139
Certification in Zero Accident	13,170	5,554	453	5,826	734	604
Rate of certification (%)	21.4	14.7	94.4	31.0	50.1	19.2

Potential Factors for the Poor Results of ZA Certification in the Manufacturing Industry

- **♦ KOSHA's inadequate support for the certification of ZA workplaces**
 - KOSHA's support limited only to demands from workplaces focusing on voluntary participation and practice
- ♦ Insufficient motivators for ZA personnel to achieve certification goals
- Relatively high rate of certification attained in electricity, gas, communication, and construction industries, which implement the in-house incentive system (performance appraisal, premium)



2-3. Incomplete Verification System for Certified Workplaces

- ▶ Poor participation of **other business types** due to implementation centered on the manufacturing and construction industry
 - The rate of other business types participating in ZAC is only **0.3%**, which is extremely lower than that of the remaining 4 business types.

<Workplaces participating in ZAC: Aug. 1979 ~ Dec. 2008>

Items	Total	Manufacturing	Electricity, gas, and water supply	Construction	Transport, warehousing, and communication	Other businesses
All workplaces [Nov. 2008]	1,552,179	253,488	1,094	265,832	43,157	988,608
Participation in ZAC	61,594	37,705	480	18,804	1,466	3,139
Share(%)	4.0	14.9	43.9	7.1	3.4	0.3

► Lack of verification system for the safety and health level of workplaces certified in ZAC

- In some cases, the original authority of certification is compromised due to the workplaces that were certified out of sheer luck despite their lower safety and health management level.
- * ZA certifications were issued even to workplaces that caused social troubles due to large-scale accident.



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2-4. Irrational Judgment Criteria for Recognized Accidents

Comments on the Zero Accident Campaign (ZAC) Regulations

- ▶ Need to readjust the possible scope of accidents recognized as non-accident as specified in the Business ZAC Enforcement Regulations (announced by the Ministry of Labor)
 - Exceptional provisions for recognizing even identified industrial accident (IA) as non-accident are limited to exceptional criteria for recognized occupational accidents (OA) in 6 items provided for in the Enforcement Regulation of the Occupational Accident Compensation Act (OAC Act); note, however, that even accidents other than those recognized as occupational accident (OA) as provided for in said Regulation are recognized as IAs in welfare or similar aspects. Thus, they are irrationally excluded from Zero Accident.
 - If this irrational case occurs in workplaces participating in ZAC,
 they are discouraged to promote ZAC while there are civil appeals regarding the operation of the system.

*** Irrational Cases**

- In case injury in the sport event of company is not considered an accident, but injury in football or tennis at lunchtime is considered an accident
- In case even injury at collective dining after closing time is considered an accident in the extension of work
- In case even injury during training or business trip outside the company is considered an accident



Current Profile of ZA Workplaces by Business Type and Scale (Aug. 1979 ~ Dec, 2008)

Comments on the Zero Accident Campaign (ZAC)

							<u>eanitations</u>
Items		Total	Manufacturing	Electricity, gas, and water supply	Construction	Transport, warehousing, and communication	Other business types
	Subtotal	1,552,179	253,488	1,094	265,832	43,157	988,608
Total	Leadoff	61,594	37,705	480	18,804	1,466	3,139
	Leadoff rate	4.0%	14.9%	43.9%	7.1%	3.4%	0.3%
	Certified	13,170	5,554	453	5,826	734	604
	Certified rate	21.4%	14.7%	94.4%	31.0%	50.1%	19.2%
	Subtotal	1,514,326	243,853	871	255,103	40,409	974,090
Laga than FO	Leadoff	38,843	30,336	210	5,869	595	1,833
Less than 50	Leadoff rate	2.6%	12.4%	24.1%	2.3%	1.5%	0.2%
employees	Certified	4,495	2,712	183	1,101	251	248
	Certified rate	11.6%	8.9%	87.1%	18.8%	42.2%	13.5%
	Subtotal	21,011	5,840	109	4,973	1,310	8,779
	Leadoff	11,100	4,921	141	4,839	396	803
50 to 99 employees	Leadoff rate	52.8%	84.3%	129.4%	97.3%	30.2%	9.1%
	Certified	3,381	1,623	141	1,231	230	156
	Certified rate	30.5%	33.0%	100.0%	25.4%	58.1%	19.4%
	Subtotal	13,088	3,155	82	4,085	1,244	4,522
100 to 299	Leadoff	9,273	2,009	98	6,360	385	421
	Leadoff rate	70.9%	63.7%	119.5%	155.7%	30.9%	9.3%
employees	Certified	3,816	928	98	2,407	218	165
	Certified rate	41.2%	46.2%	100.0%	37.8%	56.6%	39.2%
	Subtotal	3,187	525	24	1,435	167	1,036
300 to 999	Leadoff	2,107	342	26	1,589	76	74
	Leadoff rate	66.1%	65.1%	108.3%	110.7%	45.5%	7.1%
employees	Certified	1,260	204	26	972	28	30
	Certified rate	59.8%	59.6%	100.0%	61.2%	36.8%	40.5%
	Subtotal	567	115	8	236	27	181
More than 1.000	Leadoff	271	97	5	147	14	8
, , , ,	Leadoff rate	47.8%	84.3%	62.5%	62.3%	51.9%	4.4%
employees	Certified	218	86	5	115	7	5
	Certified rate	80.4%	88.7%	100.0%	78.2%	50.0%	62.5%



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3. Ways of Improvement and Revision of Regulations

Principles of Setting the Targeted Period

- Set the period for equal probability to achieve goals in any business type or scale.
- ♦ Set the period to the extent of upper 50% on the basis of ZA duration attained by workplaces of the same business type.
- Set a new probability for achieving goals to the extent that is not that far from the existing probability.
- Apply characteristic coefficients by business type and scale for probability to achieve ideal goals.
- ► Classification of business type: Classify workplaces into each business type with similar mean accident rate over the last 5 years.
- Characteristic coefficient by business type and scale: Respond to balance and policy needs among business types and scales.
- ▶ Setting a goal: To calculate the goal, first, divide the time by the 5-year mean accident rate and employee enrollment, and then multiply the results by the characteristic coefficient.

Zero Accident (ZA) Goal =
$$\frac{240,000}{\text{Accident rate}} \times \frac{1}{\text{Employee enrollment}} \times \text{coefficient}$$

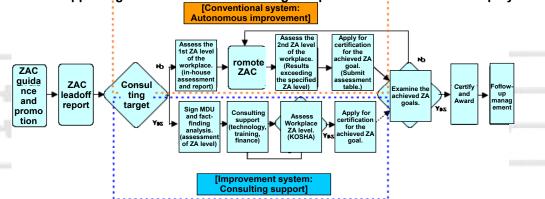


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3-2. Improvement of the ZAC Performance System

Comments on the Zero Accident Campaign (ZAC) Regulations

- ▶ Divide workplaces into autonomous improvement workplaces and "workplaces participating in the ZA Working Environment Campaign."
- Implement the ZA Working Environment Campaign only for **workplaces on demand** under mutual agreement.
 - * Prioritize supporting small-sized manufacturing companies with less than 50 employees.



- ▶ Improve the current system such that it can assess the safety and health management level of ZAC-promoting workplaces to permit **ZA Certification only if they meet a certain standard**.
- Leave the ZA level assessment to the discretion of each workplace, with certification personnel checking only compliance.



3-3. Buildup of ZAC Promotion Capacity

- O Implement the qualification system to improve the quality of ZAC certification personnel as well as their self-esteem.
- Target: KOSHA employees in charge of ZAC and other employees who want to be qualified
 - Educate and assess certification personnel before their qualification.
 (Recommended qualifying 2 or 3 employees in each organization.)
- O Execute the qualification system to assure the required quality of ZAC consulting personnel.
- Target: Korea Fire Safety Association (KFSA), Korean Public Health Association (KPHA), and other organizations participating in the ZAC consulting business
 - * The 1st training course for consulting personnel will be opened in October.
- O Prepare the government incentive system.
- Apply extra rate of accident insurance to certified workplaces (under discussion with the Ministry of Labor).
- Prioritize ZAC-certified workplaces in the nomination of awardees for government testimonials.



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3-4. ZA Recognition Criteria and System Maintenance

Comments on the Zero Accident Campaign (ZAC) Regulations

- O Rationalize scope of accidents recognized as ZA.
- As provided for in the OSH Act with regard to business trip and outside training, **IAs** occurring beyond the employer's control should be basically recognized as **ZA**.
- O Rearrange the ZA database and computer system.
 - Rearrange about 65,000 data entered in ZA DB to classify defunct workplaces into categories and supplement missing data (using outsourced services).
- With completely rearranged DB, interconnect it with the latest workplace DB available from Korea Labor Welfare Corporation (KLWC) and improve system to assure real-time data update.
- After system improvement, reflect real-time growth rate of ZAC-promoting workplaces for each organization on the ZAC performance rating index.



3-5. Revision of ZA-related Regulations

☐ Introduce written notification including definition of "Zero Accident (ZA)."
Introduce policies to restore definition of ZA from abolished notice issued by the Ministry of Labor and revitalize ZAC; add such accidents out of actual control in the workplace as raised during feedback with workplaces for improving the ZA system to a list of accidents recognized as ZA.
☐ Change the calculation standard of the targeted ZA period.
Reflect the results of outsourced research when resetting the targeted ZA period (Oct. 31, '08) as well as the results of pilot application, and then calculate and apply the targeted ZA period through a formula based on a 5-year mean accident rate in each business type and scale.
☐ Reinforce the duties of safety and health activities and certification requirements for ZA-promoting workplaces.
Mandate ZA-promoting workplaces to perform autonomous activities to improve the safety and health level and add another certification requirement, i.e., safety and health level (SHL) score.
☐ Newly establish a process of contest against ZA survey results.
Newly establish contest process to enhance transparency of ZA certification works and improve customer satisfaction.
☐ Newly establish support for creating a ZA Working Environment.
Newly introduce the "ZA Working Environment Support" program for promoting ZAC in small-sized workplaces and prescribe the required procedures and support methods, etc.
☐ Newly establish qualifications for ZA certification auditor and consultant.
To improve ZA certification services for workplaces, clearly specify the qualifications for ZA certification auditor and consultant and newly establish a training course for such personnel.



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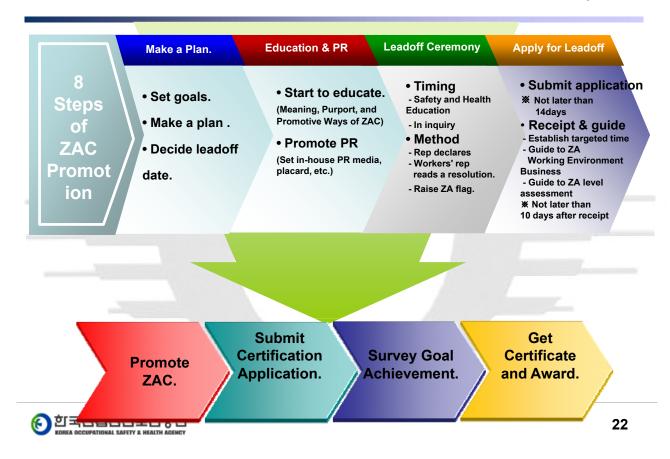
4. Comments on the Revised Regulations of ZAC

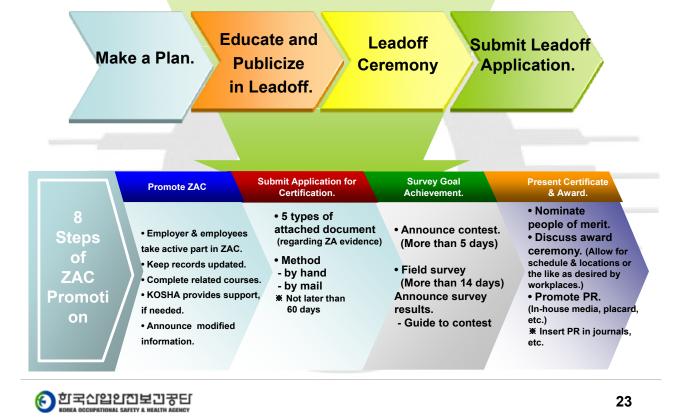
ZAC Performance **Process**

Comments on the Zero Accident Campaign (ZAC) Regulations



Comments on the Zero Accident Campaign (ZAC) Regulations





4. Comparison of Industrial Accident (IA) Standards

Comments on the Zero Accident Campaign (ZAC) Regulations

Items	Occupational Safety and Health Act (OSH Act)	Industrial Accident Compensation Insurance Act (IACI Act)	ZAC Operating Regulation
Provisions	Article 2, Section 1	Article 4, Section 1	Article 2, Section 1
Descriptio ns	Industrial accident (IA) refers to the incidence of death or disease due to construction structure, facility, raw materials, gas, heavy machinery, dust, etc., or due to occupations and other works.	Occupational accident (OA) refers to injury, disease, physical disorder, or death of employees due to occupational causes.	Zero accident refers to the non-incidence of employees' work-related death and injury or disease requiring 4 or more days' medical care.
Scope of IAs Article 14 (IA Report) requires report only on injury and disease requiring 4 or more days' medical care.		Injury or disease requiring 4 or less days' medical care is not considered an accident requiring medical care.	In case of accidents recognized as IAs under the IACI Act, accidents falling under the proviso of Article 2, Section 1 are not considered accidents.



Definition of Zero
Accident (ZA)

Refers to the non-incidence of work-related death or injury or disease requiring 4 or more days' medical care



Accidents Recognized as ZA

- Concerning accidents recognized as occupational accidents (OAs) as provided for in Article 3, Section 2
 of the IACI Act,
- Accidents occurring in rescue or emergency evacuation in natural disaster or abrupt incidents (Article 27, Section 4 of the Enforcement Decree of the IACI Act)
- Accidents occurring in the performance of any socially recognized duty in a situation of natural disaster or at a location with potential great risk of abrupt incidents (as provided for in Article 31 of said Decree)
- Accidents occurring while attending or leaving office (as provided for in Article 29 of said Decree)
- Accidents occurring in various events including sport activity (Article 30 of said Decree)
- Accidents occurring while attending or leaving office (as provided for in Article 33 of said Decree)
- Intracerebral hemorrhage, subarachnoid hemorrhage, cerebral infarction, myocardial infarction, dissociative aortic aneurysm (See Schedule 3)
- Accidents occurring outside the working hours (excluding accidents occurring at facility provided by employer or in preparation for works)
- Accidents recognized to be non-attributable to employer's violations of the OSH Act



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Judgment of Accidents Recognized as ZA

Comments on the Zero Accident Campaign (ZAC) Regulations

Occupational Accidents (OAs)

- Accidents in performing duty under the labor contract
- Accidents in physiological action (such as excretion) at duty
- Accidents in secondary actions such as work preparation, finish, etc
- Accidents due to defect of facility, etc.
- Excluding accidents due to violation of instructions or due to exclusive rights

Express IAs

- Accidents in emergency evacuation and rescue
- Accidents in outside works as directed by employer
- Accidents in attending or leaving office on vehicle offered by employer
- · Accidents in official events
- Accidents due to force majeure
- Accidents during medical care
- Accidents caused by violence of a 3rd party
- Cerebral & cardiovascular disease
- Self-inflicted injury due to mental disease

Implicit IAs

- Accidents due to personal exercise in recess
- Communicable diseases
- Accidents in personal attendance or leave of office
- ** Basically, these may not be recognized as IAs, but they fall under IAs in judicial precedents and social welfare considerations (when employees perform their duty)





responsibility of the employer must be recognized as ZA, but they have been suspended due to approval of IA.

- Accidents recognized as ZA are not determined by KLWC, but by KOSHA.



4. Classification Standard for Applicable Business Types (Article 4)

Industrial		Business Type	Business Details			
Туре	No.	Designation	No.	Designation		
1. Mining	100	Coal mining	10001	Hard coal mining		
2. Manufacturing	200	Food manufacturing	20001	Meat or Dairy Manufacturing		
3. Electricity, gas, etc.	300	Electricity / gas & water service		Electricity		
4. Construction	400	Construction	40001	Architectural & construction works		
5. Transport, warehousing, etc.	503	Railroad / track & cableway transport	50001	Railroad / track transport		
6. Forestry	600	Lumber	60001	Lumber		
7. Fishery	700	Fishery	70001	Fish catching		
8. Agriculture	800	Agriculture	80001	Crop production		
9. Other industries	900	Commissioned sale of agricultural & marine products	90001	Commissioned sale of agricultural & marine products		
Finance & insurance	000	Finance & insurance	00001 Finance			

^{**} Based on IACI Premium Rate Table as issued by the Minister of Labor (See Article 14, Sections 3 and 4 of the Employment Insurance & IACI Premium Collection Act, plus Article 12 of its Enforcement Regulation)



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4. Standard for Setting the Period of ZA Goal (Article 4)

Comments on the Zero Accident Campaign (ZAC) Regulations

Standard

Set the period of ZA goal based on the accident rate in the applicable business type and scale at leadoff and re-leadoff of ZAC.

** Although the goal of ZA period is changed due to integration, separation, extension, reduction, changed business type / scale and changed regulation during promotion of ZAC, be sure to follow the goals applied originally as of leadoff.

< Basic formula >

Zero Accident Goal = Time required till one employee sustains damage or injuries due to any IA in the applicable business type and scale

 $= \frac{\text{Annual total working hours of the workplace}}{\text{Number of victims}} = \frac{\text{Employee enrollment} \times 8h \times 300d}{\text{Number of victims}} = \frac{240,000}{\text{Accident rate}}$

* Minimize deviation of accident rate by using the 5-year mean accident rate by business type/scale.

Goal of ZA (once multiplied) = results from the division of formula-calculated value by employee enrollment

It refers to a period during which all employees of a ZAC-promoting workplace are not damaged or injured by any IA during applicable hours.



Calculate Enrollment of Full-time Workers

- Other industries except construction
 - Mean monthly enrollment of workers for the last 3 months from the preceding month in advance of leadoff date
 - Apply only the business period, if the period lasted not more than 3 months.
- * In principle, enrollment shall be checked with the IACI Premium Withholding Progress Report, but may be checked with only the payroll and attendance register.
- Construction
- Calculate the enrollment by formula.

Enrollment of full-time employees = Total construction amount × Labor rate

Monthly mean labor cost × Construction period (sum of months)

* Labor rate and monthly mean labor cost are based on those announced annually by the Minister of Labor.





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4. Calculation of ZA Period / Days (Article 6)

Comments on the Zero Accident Campaign (ZAC) Regulations

ZA Period



- Exceptional cases (with difficulty in calculating actual working hours):
 - · Workers on construction site (including desk workers on site): 1 day for 10 hours
 - · Other desk workers: 1 day for 8 hours

Sum of ZA Days

Reckoned from leadoff (or re-leadoff) date of ZAC

* Any date that is proven to be a holiday when even only 1 employee work shall be included in the sum of ZA days.



Examples of ZA Time Calculation

Cases included in calculation

- Employee of service provider in case a commissioned service cost including equipment operation is included in the construction amount
- → Attach related evidence documents of the service provider for survey.
- Equipment operators including dump truck driver and forklift driver in construction sites (continuously working by site contract)

Because even IAs -- if they happen -- handled in the subcontractor are totalized in the principal contractor.

If employees operate the corporate equipment they purchased

Cases excluded in the calculation

- If the dispatcher's employees perform security or duty by service contract.
- · Ready-mixed concrete truck driver (delivers only one article, i.e., ready-mixed concrete)
- If the equipment provider's representative operates the corporate equipment he/she purchased



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Comments on the Zero Accident
4. Standard of Record Handover for Integration & Separation (ZAC)
(Article 7)

Principle of Decision on ZA Records Handover

- In case of individual workplaces wherein their identity is recognized before and after integration or separation
- → Hand over ZA records before integration, but only one workplace with significant identity can hand over ZA records for separation.
- · If the identity of integrated workplaces is not recognized,
 - → Hand over low ZA records.
- · If the identity of separated workplaces is not recognized,
 - → Impossible to hand over ZA records

* Hand over a bundle of ZA records including achieved final multiple as well as time or days achieved additionally from time of achieved final multiple to time of handover.

Precautions for Handling Works Related to Records Handover

- · Judgment criteria for identity of workplaces
 - → Comprehensively consider full-time employer enrollment, location, title of business, and more based on the representative director and business type.
- Records on Low ZA
 - 1 : Records on workplaces with low target multiple achieved
 - ②: If ① remains identical, records on workplaces that have more remaining targeted time



FAQ



- 3 conditions should be satisfied: independence of location, work, personnel commission (in a narrow sense).
- Locational independence

Workplaces in the same location are basically regarded as a single workplace, not separated ones; workplaces distributed across locations may be considered separate workplaces, however.

- ★ Based on certain areas of business under a related organization (not any concept of the same address)
- Independence of works (actual labor conditions)

When there is a remarkably different part of labor conditions, and if the part is clearly discriminated from the mainstream, employees, total wage bill, labor management, etc., and if it is rational to handle the part as special business in operation of IACI, even businesses in the same location may be separated from one another before their application.

- Independence of personnel commission (business scale and organization)
 Micro business (e.g., branch office) or any business without independence in view of organizational relations or deskwork skills should be applied to higher tier of organization or business en bloc.
- If these 3 conditions are not clear-cut;

A business may be recognized as an individual workplace, provided it individually pays IACI Premium (e.g., as independent holder of IACI # or Business Leadoff #) or it is registered as individual employer; it may be regarded as a workplace.



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4. Leadoff and Re-leadoff of ZAC (Article 7)

Comments on the Zero Accident Campaign (ZAC) Regulations



- Deadline: Not later than 14 days after leadoff date
- How to submit: via Internet, mail, fax, visit, etc.
- * In case of submitting later than the deadline: Count back from achievement date (except initial date) and apply leadoff 14 days ago.
- Re-leadoff of ZAC
 - If there is any cause of re-leadoff, re-submitting leadoff report is unnecessary.
 - Re-leadoff date · OAs: Next day of accident date
 - · Occupational diseases: Next day of medical care approval date

Management Standard of Occupational Diseases

- The following cases are considered occupational diseases subject to ZA:
- If the initial onset of disease is not covered within the ZAC promotion period
- If an employee who did not work during the ZAC promotion period is certified as non-ZA case after retirement.



What Should be Handled after Receipt

- Announce a leadoff guide not later than 10 days.
 - ZA 1-fold targeted time
 - Safety and Health Level (SHL) Score Table and assessment method
 - ZA Working Environment Program (applicable workplace)

Recommendations for Workplaces Starting ZAC

- Install ZA dashboards to manage regular records on current ZA promotion.
- Raise ZA flag and attach posters related to industrial safety and health.



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4. Application for Certification for Achieved Goal of ZA Period (Article 11)

Comments on the Zero Accident Campaign (ZAC) Regulati

Submit Application for Certification

- Submit application for certification to KOSHA not later than 60 days from the date of achievement of ZA goals
 in the workplace.
- Improvement of questions: Request for improvement through notification (Set the period required to complement documents).
- ** The period of documentary complement is excluded from the deadline of notice of achieved ZA goals (14 days).
- · Period of employee's contest
- Allow a period of contest for the employees in the workplace to contest the Goal of ZA achievement (5 or more days).

Precautions for Handling Works Related to Application for Certification



- Send Notice of Contest via fax or mail.
- * At the same time, receive application for the Certification of Achieved ZA Goal.
- Period of contest lasts over 5 days but not more than 14 days (Give discretion to choose the period in connection with the scheduled date of workplace visit survey).



List of Attachments to Submit

- 1. SHL Score Table (Schedule 2), Safety and Health Activity Plan and execution details
- Post-accident Medical Care Approval / Return Confirmation (Schedule 4) or other documents issued by KLWC for confirming approval / return of post-accident medical care during the period of ZA goal achievement
 - * Officially acceptable documents (with official seal or signature affixed) or printed edition of notarial electronic documents
- 3. ZA Goal Achievement Confirmation (Schedule 4)
 - Workplace's rep., employees' rep., safety manager and health manager have to affix their signatures.
- 4. OA Confirmation (Schedule 5)
- 5. ZA Goal Achievement Period Quotation (Schedule 6 (1) form)



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4. ZA Certification Audit and Result Report (Article 13)

Comments on the Zero Accident Campaign (ZAC) Regulations

ZA Certification Audit

- Survey the achievement of ZA goals by document review and visit and report the audit results in the official notice (not later than 14 days).
- Request for documentary complementation: Specify the required period and request for complementation in official notice
- * If there is any problem found in the documents submitted in the survey, the period of complementation is excluded from the period of civil appeal.
- In case of returned Medical Care Application: Request competent branch office of labor to check OAs.
- * The period required for check is excluded from the deadline of notice of achievement of ZA goals (14 days)
- · If an IA (lasting for 4 or more days) at a workplace is found in a survey,
- → Report it to a competent branch office of labor.
- Check the appropriateness of the Workplace SHL Score Table (Check 60 or higher points and fact).
- Employ personnel qualified by the certification auditor to perform audit (on July 1, 2010).
- * The ZA director shall perform certification audit if there is no qualified personnel.
- * Carefully read Article 3, Section 2 of the Enforcement Decree of the IACI Act (Recognition Criteria for OAs).





Important Notes in Survey of Goal Achievement

- IAs involving only material losses are recognized as ZA.
- Any repeated accident caused by the recurrence of past injury (covered by IACI) is recognized as ZA.
- Any finding of occupational disease (D1) is recognized as ZA till it is confirmed.
 - * If the finding is confirmed as occupational disease, the ZA recognition is invalid.
- If identifying the position of an employee affected by IA (due to employee dispatch) is difficult,
 - → Identify him or her as an employee of the workplace with seal affixed.



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Comments on the Zero Accident Campaign (ZAC) Regulations



Report Results of Survey on Goal Achievement

- If achieving the ZA goals is appropriate based on the survey results,
 - → Send a notice for the result report on the goals achieved (certification #, time or days to achieve goals, period of achieving goals, etc.) and request for nomination of people of merit.
 - Deadline: Not later than 14 days after application for certification for achieved ZA goals is received
- If achieving ZA goals is inappropriate based on the survey results,
 - → Send a guide notice informing the return of such application (Return number, causes of return, etc.)
 - Attach a guide to contest procedures against the survey results (Schedule 9 form).
 - Guide to certification of next ZA goals achieved (deadline of result report same as above)
- Major causes of inappropriateness
- ✓ In case there is any occurrence of IA failing to satisfy the requirements of "ZA"
- ✓ In case there is any fraudulent document on the time or days to achieve the ZA goals
- √ In case improper goal setting affects the achievement of ZA goals





Precautions for Handling Works on Achievement Survey

- For substantial survey, be sure to conduct visit survey with document checks.
- Begin survey not earlier than 5 days -- if possible -- from the date of receiving application for certification for achieved ZA goal.

(Regarding a Notice on Contest against Achieved ZA Goals)

· Be sure to check and copy the following relevant documents for substantial survey.

Other business types (except construction)	Construction	Remarks
Final Return of IACI Premium (Check various facts such as business type and full-time employee enrollment)	Business Leadoff Report (Check various facts such as business type and full-time employee enrollment)	
Basic data for calculating ZA time (days) (Attendance Sheet or Duty Log, etc.)	Basic data for calculating ZA time (Daily Work Report or Daily Output Report, etc.)	Conduct sampling survey primarily on disadvantageous days such as holidays or consecutive holidays (3 or more days) and select 1 or more days per multiple.
	Construction Subcontract (Check total construction amount, etc).	

** Before survey, select respective multiples evenly without limitation to certain multiples in selecting disadvantageous date.



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Comments on the

Zero Accident

Precautions for Survey on Achieved ZA Goals (Clarifications)

Perform a Survey on Whole Period.

- Survey from point of leadoff to point of goal achieved beyond simple multiple.
 - For survey on 5-fold certification, conduct a survey for the entire period from initial leadoff, not from leadoff of 5-fold certification.
- * If any IA occurring within the period of ZA goal achieved is found to meet the requirements for recognition of ZA, however, re-surveying said finding is unnecessary.

Retrospective Application of Targeted ZA Time

- When there is any error found in the ZA goal set by a workplace, or there is any missing ZA time, modify it retrospectively.
 - For the application for 6-fold certification after 5-fold certification, if the missing ZA days in 5-fold certification are included for calculation,
 - → Calculate them retrospectively unless there is any problem after the details of ZA time are found
- ** 6-fold certification of ZA goal achieved means ZA goal achieved till the period of 6-fold certification from initial leadoff rather than 1-fold more achieved goal after 5-fold certification; thus modifying any error in period calculation despite retrospective calculation is appropriate.



4. Contest Against Survey Results (Article 14)

Steps of Handling Contest

- Apply for contest to: Culture and Public Relations Office (CPRO) of KOSHA Headquarters
- Period of application: Not later than 14 days from the date of notice of survey results
- Applicant for contest: Employer who is notified of return in certification audit due to disqualification
- Period of handling contest: Notify applicable workplaces and field organization of contest results not later than 14 days from the date of application.
- How to survey
- Check documents and perform field survey regarding applicant's contest (if necessary).
- Examine field organization's survey results in comparison with the workplace's contest prior to authoritative interpretation.
- If a contest is accepted after interpretation, grant ZA certification to the workplace.



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4. Certification of ZA Goal Achieved and Commendation for People of Merit (Article 15)

Comments on the Zero Accident Campaign (ZAC) Regulations

Certification of ZA Goal Achieved

- Certification of ZA goal achieved shall be set in the order of 1-, 2-, 3-, 4-, 5-
- 6-,..... n-fold certification (per multiple).
- ← Conventional: 1-, 2-, 3-, 5-, 10-, 15- ...5n-fold certification (for 5-fold or higher certification, certify in ascending order of 5's multiples.)

Regarding Awards to People of Merit

- To 4-fold or lower certified workplace
- → Award Certificate of ZA Goal Achieved as well as Merit Testimonial in the name of the regional head office (supervising office) manager.
- To 5-fold or higher certified workplace
- → Award Certificate Medal of ZA Goal Achieved as well as Merit Testimonial in the name of chief director.



 Distribute large ZA pennon: Distribute pennons to workplaces just once by demand and request.

(regardless of how many multiples of workplaces achieving the goal)

- ** Conventional: Distributed pennons only to workplaces with 3-fold or higher certification in construction or 5-fold or higher certification in other industries
- Award Certificate (Medal) and Merit Testimonial: Award them to people of merit in desired date and location.

(Unless the date and location are specified, open award ceremony at supervising office on the 4th day of every month after event of Safety Check Day.)

- * Proactively promote public relations on certified workplaces (via each organization's homepage and press release)
- **※ The Head Office Shall Report**
- ✓ Workplaces achieving 5-fold or higher goal of ZA (Report Certificate Medal and Director Commendation)



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4. Check ZA Goals Achieved During a Certain Period (Article 16)

Comments on the Zero Accident Campaign (ZAC) Regulations

Definition of Certain Period

- "Certain period" refers to a period ranging from the leadoff date of ZAC at the workplace except the point of achieved certification multiple.
 - ** Limited to period after initial leadoff date specified in ZAC Leadoff
 Report

Precautions for Handling Certification Works during a Certain Period

- Follow the same procedure as certification (receive, survey, report survey results, cancel, etc).
- Award Certificate (Medal) and Merit Testimonial, etc. (except award-related matters)



4. Cancelation of ZA Certification and Confirmation (Article 17)

Cancellation of Certification and Confirmation

- If there is any reason for canceling the certification or confirmation of the achieved ZA goal,
- \rightarrow Send a guide notice to inform the recipient of the canceled ZA certification (Cancellation No., cause of cancellation, etc).
- *** Major causes of cancellation**
- √ In case there is any occurrence of IA failing to satisfy the requirements of "ZA"
- √ In case there is any fraudulent document on the time or days for achieving ZA goals
- √ In case improper goal setting affects the achievement of ZA goals

Precautions for Handling Works Related to Canceling Certification



- Regularly check if any workplace whose ZA goal is achieved conceals IAs.
 (Use computerized ZA system and IA statistics system in KOSHA EIP)
- If there is any cause of cancellation found in a workplace, cancel anything certified (confirmed) for it.
- Recall Certificate (Medal) and Merit Testimonial from the workplace.
- * Request awarder to cancel awards for people of merit if their certification is canceled (Keep registers related to reissuance of testimonial).
- → If 5-fold or higher certification is canceled, request head office (CPRO); if 4-fold or lower certification is canceled, request awarder of affiliated organizations.



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4. Facilitating the Promotion of ZAC (Article 4)

Comments on the Zero Accident Campaign (ZAC) Regulations

Encourage Promotion

- Target of management: ZA-promoting workplaces for each organization (in progress)
- How to manage: Express interest once or more frequently, keeping in contact with workplaces.
 - Identify current progress via EMS, public notice, phone, etc., and support material distribution and more.

Administrative Matters

- Merit prize and gift may be provided for workplaces whose ZA goals were achieved (in consideration of the inventory conditions).
- Distribute ZA pennons only to workplaces holding certificate (medal) award ceremony.
 - 5-fold or lower pennons shall be managed by supervising office.
 - 6-fold or higher pennons shall be managed by head office (apply pennons to request for medal, if needed).
- Details of prize, gift, large pennons, etc., awarded to people of merit whose goals were achieved shall be kept in a register.
- Results of workplaces starting ZAC: Based on the date of receiving the Leadoff Report
- Results of workplaces achieving ZA goals: Based on the date of completed ZA ERP approval (date of certification, confirmation, etc)
- Exhaustive ERP management
 - * DO NOT delete any data entered, but minimize modifications.



4. Support for the Creation of ZA Working Environment (Article aign (ZAC) Regulations

Definition

As part of facilitating ZAC, this is a system for supporting SHL assessment and safety and health consultation required for KOSHA to promote ZAC based on the demand of workplaces.

Support Procedure

- Target: Workplaces starting ZAC (support primarily small- or mid-sized workplaces)
- How to apply for participation: Use notice or phone to apply for participation not later than 14 days after receipt of guide notice.
- Sign support agreement.
 - Sign mutual agreement between KOSHA and supervising office (Schedule 12 form).
- Sign agreement not later than 30 days from the date of receipt of ZA application.
- Agreement shall be effective not later than 1 year with regard to SHL of workplaces.
- Fact-finding study and consultation
 - Perform SHL assessment and send its results to applicable workplaces.
 - Hold consultation to improve problems exposed in safety and health (in cooperation with the relevant departments).
- * Consultation may be alternatively provided by a safety and health organization that completed a series of courses opened by KOSHA.



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4. Auditor Training Course (Article 6)

Comments on the **Zero Accident** Campaign (ZAC) Regulations

ZA Certification Auditor

- Qualification: Personnel who completed the ZA consultant training courses and passed the auditor qualification test
- Duties of auditor
 - ZA Certification Audit
- SHL assessment and consultation on operating ZA programs
- Works related to the operation of ZA certification

ZA Consultant

- Qualification: Personnel who completed the ZA consultant training courses
- Duties of the consultant
- Consultation on the improvement of cultural indicators: Safety alertness of management and employee and level of organizational communication
- Consultation on the improvement of improvement indicators: Level of risk control activities and details and execution level of safety activity plan
- Other consultations on better SHL of workplaces



Qualifications for Auditor and Consultant

- 1. Safety- & health-related technicians under the National Technical Qualification (NTQ) Act
- 2. Industrial safety supervisor or industrial hygienic supervisor under the Industrial Safety and Health (ISH) Act
- 4. Personnel who acquired bachelor's or higher degree and had 3 years' or longer experience of practice in safety & health or related fields
- 5. \(\text{Personnel who qualified as Safety- & Health-related industrial technician under the NTQ Act and had 5 years' or longer experience of practice in fields related to safety & health
- 6. Experienced safety and health personnel who worked for safety and health organizations or companies for over 5 years



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Comments on the Zero Accident Campaign (ZAC) Regulations

Consultant Training Course

- Curriculum (28 hours)
 - Regulations on ZA certification: 7 hours ZA certification audit practice: 3 hours
 - Workplace SHL assessment and consulting practice: 10 hours
 - ISH Act and IACI Act: 6 hours
- * Apply for training courses by submitting documents that prove the Qualifications (Article 28, Section 1).

Auditor Qualification Test

- Test subjects (4 subjects)
 - Regulations on ZA certification
- Practices of ZA certification audit
- Workplace SHL assessment and consulting practices
- ISH Act and IACI Act
- Target: Personnel who completed consultant training courses
- Personnel who completed the courses may sit for the test up to 3 times; those who failed the test 3 times shall complete the courses again.



4. Interim Measures (Bylaw)

Enforcement Schedule of Revised Regulations

- Date of enforcement: Apr. 1, 2010
- ZA certification audit by qualified personnel: Jul. 1, 2010
- SHL assessment results limited to 60 points: Jan. 1, 2011
- Workplaces with new ZAC leadoff after April 1: Apply these regulations.
- Existing workplaces: Apply these regulations from the next day of the final certification date based on previous regulations.
- * Promote ZAC before date of enforcement and give careful information guide to employers (notice).



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5. How to Set a New Zero Accident (ZA) Goal

5-1. Definition of Goals and New Ways of Setting Goals

Mean period required for 1 IA victim to occur by business type and scale of applicable workplace

ZA Goal Calculation Formula

< Basic formula >

Zero Accident (ZA) Goal = Time required till one employee sustains damage or injuries due to any IA in the applicable business type and scale

 $= \frac{\text{Annual total working hours of the workplace}}{\text{Number of victims}} = \frac{\text{Employee enrollment} \times 8h \times 300d}{\text{Number of victims}} = \frac{240,000}{\text{Accident rate}}$

- Minimize the deviation of the accident rate by using the 5-year mean accident rate.
- Targeted time is calculated by division using employee enrollment for symbolic goals to be achieved across the entire workplace.
- According to the comparison between old and new goals, mean goal amounts to 84.1% versus current goal; there are relatively uniform distributions of goal among business types.
- Large-sized workplaces with difficulty in ZA certification showed significantly reduced goals.



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5-2. Assessment by Goal-setting Method

Comments on the Zero Accident Campaign (ZAC) Regulations

Purpose of Assessment

Compare newly calculated goals with current goals by business type (62 types) and scale (20 sizes) totaling 1,240 sections and consequently examine need to adjust goals by detecting deviations.

Assessment by Business Type Ratio to Ratio to current With characteristic Number of Industrial type **Current goals** New goals current assessments coefficients applied goals goals Total 927 944,071,280 84.1% 652,083,127 793.633.472 71.2% Minina 30 3,373,600 4,810,951 142.6% 1,909,533 56.6% Manufacturing 507 495,889,520 351,017,661 70.8% 301,846,554 60.9% Electricity, gas, and 20 30,000,368 26,067,756 93.2% 27,976,640 107.2% Transport, warehousing 149 167,910,080 119,915,954 71.4% 103,693,788 61.8% and communication 21 25,018,160 18,031,222 72.1% 17,292,312 69.1% Forestry 11,985,247 107.2% **A**ariculture 15 11,176,640 13,367,795 119.6% Other businesses 184,180,240 210,287,505 114.2% 187,170,128 101.6% Finance & insurance 27,976,640 43,216,734 154.5% 37,071,108 132.5%



Assessment by Business Size

	ployee ollment	Number of assessments	Current goals	New goals	Ratio to current goals	With characteristic coefficients applied	Ratio to current goals
1	Γotal	927	944,071,280	793,633,472	84.1%	689,154,235	73.0%
	10	59	1,804,800	15,374,793	851.9%	3,074,959	170.4%
	30	54	5,040,000	17,857,457	354.3%	4,556,730	90.4%
	50	109	15,976,000	42,291,279	264.7%	13,075,618	81.8%
	100	107	28,813,120	57,000,102	197.8%	25,484,366	88.4%
	200	104	48,393,200	65,132,560	134.6%	47,075,119	97.3%
	300	100	79,944,160	84,653,498	105.9%	-	-
	500	92	98,550,000	99,699,979	101.2%	-	-
	700	88	108,300,000	95,225,522	87.9%	-	-
1	1000	78	136,650,000	101,369,865	74.2%	-	-
2	2000	68	178,800,000	107,514,208	60.1%	-	-
3	3000	68	241,800,000	107,514,208	44.5%	-	-



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Comments on the Zero Accident Campaign (ZAC) Regulations

Calculation Formula for Less than 300 Employees

- New goals are higher than the current ones, so they do not meet the policy purport of facilitating the ZAC of small- or middle-sized workplaces.
 Therefore, use the characteristic coefficient of such workplaces.
 - < Formula applicable to workplaces with enrollment of less than 300 employees>

Zero Accident (ZA) Goal =
$$\frac{240,000}{\text{Accident rate}} \times \left(0.2 + \frac{0.8 \times (\text{Employee enrollment - }10)}{290}\right)$$

For characteristic coefficient for small- and middle-sized business, adjust the range from 10 to 300 through 0.2- to 1-fold uniform distribution.



Assessment by Business Type

Construction type	Number of assessments	Current goals	New goals	Ratio to current goals	With characteristic coefficients applied	Ratio to current goals
Total	164	104,850,000	176,687,219	168.5%	88,343,610	84.3%
Less than 5 billion	7	850,000	1,530,715	180.1%	765,358	90.0%
5 billion to 9.9 billion	11	3,300,000	4,570,678	138.5%	2,285,339	69.3%
10 billion to 29.9 billion	62	27,900,000	37,338,341	133.8%	18,669,171	66.9%
More than 30 billion	84	72,800,000	133,247,485	183.0%	66,623,743	91.5%

Calculation Formula for Less than 300 Employees

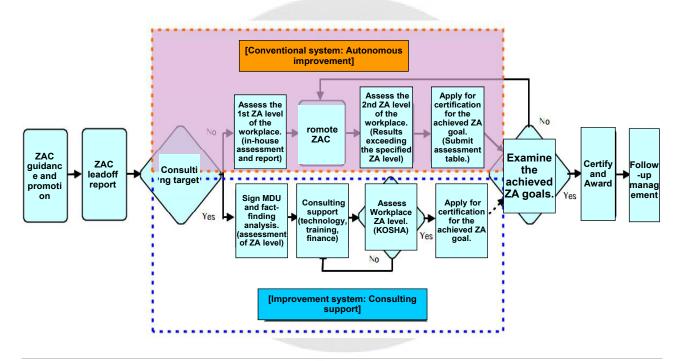
 New goals yielding 1.4 to 1.8 times higher results than the current ones across entire scale, so they do not meet purport to reflect decreasing personnel demands on the changing construction environment. Therefore, apply characteristic coefficient (0.5) for construction.



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6. Creation of ZA Working Environment

6-1. Creation of ZA Working Environment





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6-2. Business Procedures

Comments on the Zero Accident Campaign (ZAC) Regulations

- ▶ Business performance process for the "Creation of ZA Working Environment Campaign"
- Step 1: Business agreement (MOU) signed between supervising office and workplace
- Step 2: Fact-finding study on the workplace
 - Use the Workplace SHL Score Table and Safety Orientation Test Program.

Step 3: Problem resolution based on the results of a fact-finding study (for 1 year)

- In case of unsafe actions or poor safety knowledge: Offer training courses and materials.
 - In case of unsafe or hazardous/dangerous conditions: Improve facilities.
 - ⇒ Provide financial support (in connection with CLEAN project or financial services).
- * In case of consulting support for workplace fact-finding analysis and problem resolution, use private group support budget and relevant specialized organizations.

Step 4: Assessment of ZAC level in Workplaces

- Identify pre- and post-support effects through measurement tools such as those used in Step 2.

Step 5: Certification of ZAC Goal Achieved (by request)

- Targeting workplaces that achieved higher than the specified level after the assessment of the workplace IA indicator.



6-3. Fact-finding Study and Consulting Services for Workplaces

- ▶ Use SHL Score Table to conduct a fact-finding study on workplaces.
 - Hold consultation to improve any problem deduced.
- For consultations, use appropriate means such as training support, material supply, and technical support in response to the assessment items (request for support from technical departments, if needed).

[Components of Workplace SHL Score Table (5 fields)]

Items	Items (major category)	Weight	Remarks
	Total	100	
	Management's safety alertness	30	
Cultural indicators (70)	Employees' safety alertness	25	Reflect results of Safety Orientation Test.
	Level of organizational communication on safety and health	15	
Preventive indicators (30)	Level of hazard / risk control activities	15	
	Details and execution level of the Safety & Health Activity Plan	15	



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7. Questions & Answers

