A new decade for social changes
Designing Strategies to Improve the Competitiveness of Special Economic Zones

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Abstract. The development of Special Economic Zones (SEZs) is a way for many countries to increase their economic growth and competitiveness. Indonesia has been one of the countries that has developed the SEZ model since 2009, although long before the economic zone model in other forms had been implemented. SEZ's main activities currently cover the processing and tourism industries. However, the development of SEZs in Indonesia has not been entirely able to become a driving force for the economy to increase economic growth and regional and national competitiveness. This study aims to identify the determinants and design strategies that can improve the competitiveness of SEZs in Indonesia. The qualitative multiple-case study method was applied to answer the research problem. Focus Group Discussions, Group Interviews, in-depth interviews, and document studies were carried out to obtain data, then processed by compiling them into open coding, axial coding, and selective coding, and then identification, looking at the patterns formed and interpretation of the existing data using techniques cross-case synthesis analysis. There are six determinant factors in research findings: innovation, collaboration, human resources, governance, location, and incentives. Furthermore, these six factors become the basis for designing strategies to improve the competitiveness of SEZs in Indonesia.

Keywords. Special Economic Zones, Competitiveness, Strategy, Determinant Factors, Multiple-Case Study

1. Introduction

Special Economic Zones (SEZ) are one form of Economic Zones that are starting to be developed in Indonesia. A total of 19 Special Economic Zones have been designated by the Government of Indonesia since the issuance of Law Number 39 of 2009 until 2021, with the status of 12 operating, seven still under construction or not yet operating (www.kek.go.id). After running for more than ten years, of course, it is necessary to know the achievements that have been obtained and felt by the community from the development of Special Economic Zones.

The development of Special Economic Zones is a strategy used by various countries to increase their economic growth and competitiveness. SEZs have become an industrialization policy instrument in many countries after their success can be proven by countries that have already implemented them, such as China and India. Investment in infrastructure can positively influence economic complexity. Therefore, it can be recommended that there should be policies to support industrial development that target incentivizing economic infrastructure
Furthermore, the development should prioritize specific geographical areas such as special economic zones to improve the lives of citizens, boost the economy, attract foreign direct investment and create jobs (Chauke & Ncanywa, 2021). Indonesia is one of the countries that use Special Economic Zones as an instrument to increase economic growth, competitiveness, and equitable development. However, not all of these Economic Zones can become magnets to attract investors to their development. Based on this, this research aims to identify the determinant factors that can encourage the development of SEZs and design strategies that can increase the competitiveness of Special Economic Zones.

2. Literature Review

For a long time, the development of Special Economic Zones (SEZ) has been believed to be a practical step in economic development efforts in various countries. Various experts have also written the history of SEZ development, including Pakdeenurit, Suthikarnarunai & Rattanawong (2014), who stated that Special Economic Zones were built in 1937 in the United States, namely in New York and then in 1942 in Puerto Rico region. In the following years, various countries followed with different terms. As a result, several forms or types of SEZs have been developed, depending on the purpose of its establishment, state infrastructure, political situation, and geographic location. In general, six types of SEZs are well known: Free Trade Zone, Export Processing Zone, Enterprise Zone, Single Factory, Free Ports, and Specialized Zone (Pakdeenurit Suthikarnnarunai & Rattanawong, 2014).

A study conducted by Zeng (2017) related to the experiences of China and Africa in developing SEZs explains that, in general, SEZs provide two main types of benefits. The first is "static" economic benefits such as job creation, export growth, government revenue, and foreign exchange earnings. The second is more "dynamic" economic benefits such as increased skills, technology transfer, innovation, economic diversification, and increased productivity of local companies. Based on a study conducted in China, several critical success factors were found: firm commitment and government support to pioneer market-oriented economic reforms. The second is agrarian reforms (land reforms). The third is in the form of investment incentives and institutional autonomy. Fourth, Foreign Direct Investment and the Chinese diaspora outside China. Fifth, technology learning, innovation, improvement, and a strong relationship with the domestic economy. Sixth a culture of innovation that is grown for all circles. Seventh, clear objectives have benchmarks of appeal and competition. The last key success factor is the strategic location advantage of the built SEZ.

A study was conducted by Singh & Sanjeev (2019) to evaluate the effect of the location of the Indore SEZ on business development in Madhya Pradesh, India. The results of the study indicate that the determinants of the success of SEZs, which consist of location, industrial investment support, investment costs, skilled human resources, management and services, government policies, laws and regulations, and stable Government, significantly influence the development of SEZs and economic activity.

Furthermore, Aggarwal's research (2019) describes the analytical framework for the success factors and SEZ development. The pillars in question consist of, first, a strategic approach that is well-organized and aligned between SEZs and the national development strategy. Second is strategic dynamism, namely the ability to respond to dynamic economic realities. Third, strategy implementation is a strategic approach that can execute strategy efficiently. Countries that successfully practice these three pillars are China, Taiwan, and South Korea. The three countries can harmonize SEZ development with general development strategies, influential executives, continuous evaluation, and improvements over time. In
addition to the most successful category in SEZ development, other countries fall into the moderately successful and less successful categories. Southeast Asian countries such as Indonesia are included in the group that successfully implemented SEZs. Meanwhile, Sub-Saharan Africa and Central Asia countries are included in the less successful group in implementing SEZs.

Based on a study conducted by Pakdeenurit Suthikarnnarunai & Rattanawong (2014, 2017) on economic areas in China and India, to obtain key success factors for developing SEZs in Thailand, several key factors were obtained that could drive success, namely first, location advantage. The second is the macroeconomics of the country. Third, investment support from the industry. Fourth, investment costs. Fifth, skilled labor. Sixth, management, and service. Seventh, government policies. Eighth, laws and regulations. Ninth, stability and consistency of the Government. Then in the subsequent measurement, the first and second factors by Pakdeenurit, Suthikarnnarunai & Rattanawong were combined. As a result, eight critical success factors were offered in developing SEZs in Thailand (Pakdeenurit Suthikarnnarunai & Rattanawong, 2014, 2017).

The success of the Chinese Government in building the Shenzhen SEZ to develop the Shenzhen region, increase economic growth, and regional and national competitiveness has become an example and best practice model for developing SEZs. In addition, Shenzhen served as a model for China's successful reform and opening-up process. The key factors for the success of SEZ Shenzhen, according to Zeng (2011), are, first, Strong commitment from top leadership and high-level pragmatism, flexibility, and autonomy. The second, A gradualist approach toward reform. Third, preferential policies and institutional autonomy. The fourth proper role of the Government. Fifth, foreign direct investment and the diaspora. Sixth is the Public-private partnership approach. Seventh, Technology innovation, adaptation, and learning. Eighth, Innovative cultures. Ninth, Clear goals and vigorous benchmarks, monitoring and competition, and tenth, Location advantage.

The determinants of the success of SEZs are the fundamental indicators for further analysis related to the determinants of the success of SEZs in Indonesia because the current condition of SEZs in Indonesia is considered to have not achieved the expected development goals. So that the study conducted is expected to be able to identify what are the problems and what can be a determining factor for the development of SEZs while at the same time increasing regional competitiveness. Based on these conditions, this also becomes state of the art in the research conducted.

3. Methodology

The research uses a qualitative approach, with a multiple-case study research design as a strategy to answer research questions. According to Yin (2018), research with a case study design is carried out to examine contemporary phenomena in real-life contexts, especially when the boundaries between phenomena and contexts are not visible, and use data from various sources. In line with Dul & Hak (2010), the direction of the research objectives is first to analyze the determinants of the Special Economic Zones in Indonesia today, which are represented by the Galang Batang SEZ, Mandalika, and Sorong SEZ. Second, to design a strategy for developing Special Economic Zones in Indonesia.

Data was collected using Focus Group Discussion, unstructured interviews, and Group Interviewing techniques. The resource persons in this study were the SEZ National Council which represents the Government, the Governor as the Chair of the Zone Council, Special Economic Zone Managers, Academics, and Business Actors. Other data collection methods are
secondary data collected from the internet and document studies in the form of policy products such as legislation and related products related to SEZs.

### Table 1. Profiles of Galang Batang, Mandalika, Sorong SEZs

<table>
<thead>
<tr>
<th>Descriptions</th>
<th>Galang Batang</th>
<th>Mandalika</th>
<th>Sorong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Bintan, Kepulauan Riau</td>
<td>Central Lombok, West Nusa Tenggara</td>
<td>Sorong, West Papua</td>
</tr>
<tr>
<td>Management</td>
<td>PT. Bintan Alumina Indonesia (Private Enterprise)</td>
<td>Indonesia Tourism Development Corporation (State-Owned Enterprise)</td>
<td>PT. Malamoi Olom Wobok (Local-Owned Enterprise)</td>
</tr>
<tr>
<td>Sector</td>
<td>Processing Industry Brownfield/Operated</td>
<td>Tourism Greenfield/Operated</td>
<td>Processing Industry Brownfield/Operated</td>
</tr>
<tr>
<td>Development Stage</td>
<td>National Council of SEZs, Local Government, University, Chamber of Commerce, Focus Group Discussion</td>
<td>National Council of SEZs, ITDC, Province Government, University, Interview</td>
<td>National Council of SEZs, Local Government, PT. MOW, University, Group Discussion, Interview</td>
</tr>
<tr>
<td>Data Sources</td>
<td>Source: Processed by the author (2022)</td>
<td></td>
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</tr>
</tbody>
</table>

The data processing in the multiple case study research design is not much different from qualitative research in general. The data obtained from the interviews were processed by grouping using coding techniques carried out in systematic stages. To ensure the validity of the data, the researchers triangulated data from several sources during the data collection process. Data analysis was carried out in stages, and namely, first, a general analysis was carried out. The analysis is carried out by discussing the data obtained from the data collection results (working your data from the ground up), associated with generally accepted concepts, and then looking at the existing patterns in the data. The second stage uses an analytical technique that is more relevant to the case study research design, namely cross-case synthesis analysis. Data analysis attempts to select, sort, discard, and classify data to answer two problems, including (1) what themes can be found in these data, and (2) how do these data contribute to the theme? There are three critical steps in data analysis, namely: (1) identification of what is in the data, (2) seeing patterns, and (3) interpretation. Then, data is arranged according to the theme and analyzed, and the relationship between phenomena is interpreted to conclude. Finally, conclusions are drawn based on analysis and interpretation that contain implications and suggestions (Nugrahani, 2014). The data analysis is intended to aggregate the findings and then compare or synthesize each pattern in the case under study to conclude.

### 4. Case Studies: Galang Batang, Mandalika, and Sorong SEZs

In the last few decades, the development of economic zones has become a global phenomenon. As a political tool and development strategy, the development of Economic Zones has a tremendous impact on various countries' economic growth and competitiveness. The forerunner of the Economic Zone's development as an area with special economic privileges has existed since the 16th century. However, until the 1960s, its existence and role were still minor in influencing the world economy (Guangwen, 2003). Based on data from the United
Nations Conference on Trade and Development (UNCTAD) published in the 2019 World Investment Report, it is stated that almost 5,400 Special Economic Zones have been built in 147 countries in 2018 and are planned for the following year no less than 500. SEZ will be built soon (World Investment Report, 2019). The enthusiasm of various countries to build SEZs is so great as one of the instruments of economic growth in their development strategy. It is driven by the success of various countries in implementing SEZ development to increase their economic growth, including what has been done and achieved by China. However, not all countries have had success in developing SEZs, which can attract investors to invest in the country. As a result of problems that arise and offers that are considered unattractive to investors. So there is no guarantee that SEZ development can encourage economic growth and competitiveness of a country.

The global phenomenon of the formation of Economic Zones in various countries does not escape the economic development strategy drawn up by the Government of Indonesia. Various efforts have been carried out by the Government, including developing Economic Zones as carried out by various countries to increase their economic competitiveness. The development of economic zones in Indonesia has developed from time to time. For example, economic Zones in Indonesia began in 1970 with the Implementation of the Batam Island Development Project. They made Batam Island a logistics and operational base for businesses related to offshore oil exploration and exploitation in the surrounding oceans. In the next period, the Government developed other forms of economic zones until the final form developed by the Government was Special Economic Zones based on Law Number 39 of 2009 concerning Special Economic Zones, as shown in the following figure.

**Figure 1.** The Evolvement of Economic Zones in Indonesia

![Figure 1](image)

Source: Processed by the author (2021)

The Special Economic Zones, which the Government of Indonesia currently designates, can generally be divided into two categories based on the development process, as
stated by the Secretary of the SEZ National Council, which consists of greenfield areas and brownfield areas. The first category is greenfield SEZ, an area built from vacant land to become an SEZ that is ready to be operated and filled by companies running their business in the area. The second category is the area that previously had business activities to be later designated as a Special Economic Zone following the field of business (brownfield). As described in the following table, some of the existing SEZs are brownfield areas.

Table 2. Special Economic Zones in Indonesia

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Area Category</th>
<th>Location</th>
<th>Core Business</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sei Mangkei</td>
<td>Brownfield</td>
<td>Simalungun Regency</td>
<td>Palm Oil Processing Industry, Rubber Processing Industry, Tourism, Logistics</td>
<td>Operated</td>
</tr>
<tr>
<td>2</td>
<td>Tanjung Lesung Mandalika</td>
<td>Brownfield</td>
<td>Pandeglang Regency Central Lombok Regency Palu City</td>
<td>Tourism</td>
<td>Operated</td>
</tr>
<tr>
<td>3</td>
<td>Palu</td>
<td>Brownfield</td>
<td>Palu City</td>
<td>Nickel and Iron Ore Processing Industry, Cocoa Processing Industry, Rattan Processing Industry, Logistics</td>
<td>Operated</td>
</tr>
<tr>
<td>4</td>
<td>Bitung</td>
<td>Brownfield</td>
<td>Bitung City</td>
<td>Coconut Processing Industry, Fishery Industry, Pharmaceutical Industry, Logistics</td>
<td>Operated</td>
</tr>
<tr>
<td>5</td>
<td>Morotai</td>
<td>Greenfield</td>
<td>Kepulauan Morotai Regency</td>
<td>Fishery Industry, Logistics</td>
<td>Operated</td>
</tr>
<tr>
<td>7</td>
<td>MBTK</td>
<td>Brownfield</td>
<td>East Kutai Regency</td>
<td>Palm Oil Processing Industry, Wood Processing Industry, Energy Industry, Logistics</td>
<td>Operated</td>
</tr>
<tr>
<td>8</td>
<td>Tanjung Kelayang</td>
<td>Greenfield</td>
<td>Belitung Regency</td>
<td>Tourism</td>
<td>Operated</td>
</tr>
<tr>
<td>No.</td>
<td>SEZ Name</td>
<td>Type</td>
<td>Regency/Province</td>
<td>Industry/Industry</td>
<td>Status</td>
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</tr>
<tr>
<td>1</td>
<td>Sorong</td>
<td>Brownfield</td>
<td>Sorong Regency</td>
<td>Nickel Processing Industry, Palm Oil Processing Industry, Forest and Plantation Products Industry, Logistics</td>
<td>Operated</td>
</tr>
<tr>
<td>3</td>
<td>Galang</td>
<td>Brownfield</td>
<td>Bintan Regency</td>
<td>Bauxite Processing Industry, Logistics</td>
<td>Operated</td>
</tr>
<tr>
<td>4</td>
<td>Kendal</td>
<td>Greenfield</td>
<td>Kendal Regency</td>
<td>Garment, Furniture, Not Food &amp; Beverage, Operated Automotive, Electronics, Logistics</td>
<td>Not Operated</td>
</tr>
<tr>
<td>5</td>
<td>Singhasari</td>
<td>Greenfield</td>
<td>Malang Regency</td>
<td>Tourism, Technology Development/Digital Economy</td>
<td>Not Operated</td>
</tr>
<tr>
<td>6</td>
<td>Likupang</td>
<td>Greenfield</td>
<td>North Minahasa Regency</td>
<td>Tourism</td>
<td>Operated</td>
</tr>
<tr>
<td>7</td>
<td>Batam Aero</td>
<td>Greenfield</td>
<td>Batam City</td>
<td>Aircraft Maintenance-Roll-Over Industry</td>
<td>Not Operated</td>
</tr>
<tr>
<td>8</td>
<td>Nongsa</td>
<td>Brownfield</td>
<td>Batam City</td>
<td>Digital and Information Technology Industry, Tourism</td>
<td>Operated</td>
</tr>
<tr>
<td>9</td>
<td>Lido</td>
<td>Greenfield</td>
<td>Bogor Regency</td>
<td>Tourism, Creative Industry</td>
<td>Not Operated</td>
</tr>
<tr>
<td>10</td>
<td>Gresik</td>
<td>Brownfield</td>
<td>Gresik City</td>
<td>Metal Industry, Electronics, Chemical, Energy, Logistics</td>
<td>Operated</td>
</tr>
</tbody>
</table>

Source: Processed by the author (2021)

Nineteen SEZs formed by the Government since 2012 are spread throughout the western, central, and eastern parts of Indonesia. As the initial objective of the SEZ development, the Government seeks to distribute development evenly in areas that lack economic centers. For this reason, it is hoped that building an SEZ can foster economic development in the surrounding area, including the construction of the Galang Batang SEZ, Mandalika SEZ, and Sorong SEZ.

Located in Bintan Regency, Riau Islands Province, the construction of the Galang Batang SEZ is the key to the independence of the aluminum industry in Indonesia. Bintan Island is one of Indonesia’s gateways to the western region. Its strategic location at the entrance to the Malacca Strait makes Bintan Island a tourist destination and investment destination for travelers.
from Singapore, Malaysia, and China. Bintan Regency has an area of 88,038.54 KM2 consisting of 240 large and small islands, but only 39 islands are inhabited; the rest have not been occupied only for agricultural activities (www.bintankab.go.id). The Bintan Regency Government has made the area a Strategic Area to be developed as an Industrial Activity Center (Yellow Zone), Trade and Service Activity Center (Blue Zone), and a Tourism Activity Center (Green Zone) (Bintan Regency Government, 2020).

The Galang Batang Special Economic Zone is located in the Yellow Zone, an industrial area—standing on a planned area of 2,333.6 hectares in Bintan Regency, Riau Islands Province, PT. Bintan Alumina Indonesia (PT. BAI) is a purely Indonesian private company collaborating with Foreign Investments to build the Galang Batang SEZ. PT. BAI started its business in Bintang Regency in 2009, with its business activities engaged in bauxite mining. In the business activities carried out by PT. BAI was relatively underdeveloped, so changes were made by inviting foreign investors to build SEZs. Before being designated as a Special Economic Zone, the Galang Batang Area was a Free Trade and Free Port Area (KPBPB) or often referred to as the Free Trade Zone (FTZ) in Bintan Regency. Based on data owned by the Bintan Regency Government, disclosed during the FGD activities, 15 (fifteen) Free Trade Areas and Free Ports (KPBPB) spread across the Bintan Regency area, including the Galang Batang FTZ, which later became the Galang Batang SEZ.

Next is the Mandalika Special Economic Zone (SEZ), located in Pujut District, Central Lombok Regency, West Nusa Tenggara Province. The richness of culture and natural beauty of Lombok Island is not inferior to Bali Island, which is the leading tourist destination in Indonesia and is located side by side. So that it is not wrong if the Government establishes Mandalika Lombok as one of the National Tourism Strategic Areas or often referred to as "New Bali," as stipulated in Presidential Regulation Number 3 of 2016 concerning Acceleration of Implementation of National Strategic Projects. The development of Mandalika as a Special Economic Zone into a National Strategic Project as stipulated in the Presidential Regulation. The follow-up to the determination of the Mandalika Zone as a Special Economic Zone, which the Government previously established in 2014 with the issuance of Government Regulation Number 52 of 2014 concerning the Mandalika Special Economic Zone.

Built-in an area of 1,035.67 hectares, the Mandalika SEZ is focused on becoming the largest beach tourism area after Bali. After being designated as SEZ on June 30, 2014, the Indonesian Tourism Development ITDC officially started the development of the area on October 27, 2017. The Mandalika SEZ is expected to transform into "New Bali" as Indonesia's mainstay tourist destination that can attract the interest and attention of domestic and foreign tourists. Key attractions of tourist areas are attractions and accommodations. In 2017, ITDC agreed with Dorna Sports SL as the exclusive commercial and TV rights holder for MotoGP and Motul FIM Superbike World Championship to bring the attraction to Mandalika (National Council of SEZs, 2018).

In addition to offering attractions in the form of MotoGP and SuperBike racing planned to be included in the annual calendar, Mandalika also offers natural scenery, which is its main attraction. Seven tourist locations are included in the Mandalika SEZ, namely Kuta Beach, Serenting Beach, Seger Beach, Tanjung Aan Beach, Grupuk Beach, and Merese Beach and Hill. In addition, quite well known to domestic and foreign tourists, such as Tourism Villages and other beaches scattered on the island of Lombok.

Next is the SEZ, located at the eastern tip of Indonesia with an area of 523.7 hectares from the initial plan of 7000 hectares. The Sorong Special Economic Zone (SEZ) is new hope for the people of West Papua in general and Sorong Regency in particular to feel the economic
impact of the area's development. The Sorong SEZ is located in the easternmost position of the 19 SEZs that the Government has determined to be the gateway and Indonesia's hub with countries in the Pacific region and areas in Eastern Indonesia.

After being designated as an SEZ, it cannot directly proceed with constructing infrastructure and facilities in the Sorong SEZ area. Because the Sorong Regency Government took approximately three years to prepare the organization and the area to be built. On October 11, 2019, the Sorong SEZ was just inaugurated by the Coordinating Minister for the economy. For implementing the development and management of the Sorong SEZ Area, the Regent of Sorong decided to appoint a Local-Owned Enterprise Malamoi Olom Wobok (MOW) Sorong, as the Development and Management Business Entity of the Sorong SEZ. The Sorong SEZ consists of three zones: the logistics zone, the industrial zone, and the export processing zone. The main activities focus on the nickel processing industry, the palm oil processing industry, the sago plantation forest product industry, and logistics.

To further explore the driving factors that accelerate the development of the Galang Batang SEZ, Mandalika SEZ, and Sorong SEZ, it is necessary to conduct an analysis related to the actors involved in the development of the SEZ. The actors in question are institutions that are directly or indirectly involved in the development and management of SEZs. In addition, to those stipulated in the legislation, other parties such as universities, MSME actors, and civil society around the SEZ environment are also stipulated.

Table 3. Roles of Actors in Galang Batang, Mandalika dan Sorong SEZs

<table>
<thead>
<tr>
<th>SEZs Actors</th>
<th>Galang Batang</th>
<th>Mandalika</th>
<th>Sorong</th>
</tr>
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<tbody>
<tr>
<td>National Council of</td>
<td>Providing fiscal and non-fiscal incentives (customs, taxation, immigration,</td>
<td>Providing fiscal and non-fiscal incentives (customs, taxation, immigration,</td>
<td>Providing fiscal and non-fiscal incentives (customs, taxation, immigration,</td>
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<td>SEZs</td>
<td>employment, land, investment, and security) to business actors in SEZs</td>
<td>employment, land, investment, and security) to business actors in SEZs</td>
<td>employment, land, investment, and security) to business actors in SEZs</td>
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<tr>
<td></td>
<td>Promotion of SEZ Area to domestic and foreign investors</td>
<td>Promotion of SEZ Area to domestic and foreign investors</td>
<td>Promotion of SEZ Area to domestic and foreign investors</td>
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<td>Provision of supporting infrastructure outside the area, such as roads,</td>
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<td></td>
<td>bridges, and airports</td>
<td>bridges, and airports</td>
<td>airports</td>
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<td></td>
<td>Regional Development Capital Participation</td>
<td>Regional Development Capital Participation</td>
<td>Regional Development Capital Participation</td>
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<td>SOE support in supporting facilities</td>
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<td>SOE support in supporting facilities</td>
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<tr>
<td>Regional Council</td>
<td>Administrator</td>
<td>Development and Management Business Body</td>
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<tr>
<td>• Provision of infrastructure outside the area, such as roads to the area</td>
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<tr>
<td>• Provision of fiscal and non-fiscal incentives related to local taxes, regional levies, permits, land</td>
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<tr>
<td>• Region promotion support</td>
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<td>• Provision of public service facilities</td>
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<td>• Region promotion support</td>
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</tr>
<tr>
<td>• Provision of public service facilities</td>
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<tr>
<td>• Land dispute resolution</td>
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<tr>
<td>• Establish a Task Force for the Acceleration of Regional Development</td>
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</tr>
<tr>
<td>• Provide various types of licensing services related to the implementation of business activities, starting from establishing, running, and developing a business in the Galang Batang SEZ</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• Supervise and control the operations of the Galang Batang SEZ</td>
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<tr>
<td>• Submit the operational report of the Galang Batang SEZ to the Regional Council</td>
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<tr>
<td>• Provide various types of licensing services related to the implementation of business activities, starting from establishing, running, and developing businesses in the Mandalika SEZ</td>
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<tr>
<td>• Supervise and control the operations of SEZ Mandalika</td>
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<tr>
<td>• Submiting the operational report of the Mandalika SEZ to the Regional Council</td>
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<td>• Supervise and control the operations of SEZ Mandalika</td>
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<td>• Manage the SEZ Area and submit the report to the</td>
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### Administrator
- Provide various types of licensing services related to the implementation of business activities, starting from establishing, running, and developing a business in the Galang Batang SEZ
- Supervise and control the operations of the Galang Batang SEZ
- Submit the operational report of the Galang Batang SEZ to the Regional Council

### Development and Management Business Body
- Apply for permits related to the construction of the Mandalika SEZ

### Regional Council
- Provision of infrastructure outside the area, such as roads to the area
- Provision of fiscal and non-fiscal incentives related to local taxes, regional levies, permits, land
- Region promotion support
- Provision of public service facilities
- Land dispute resolution
- Establish a Task Force for the Acceleration of Regional Development
- Provide various types of licensing services related to the implementation of business activities, starting from establishing, running, and developing businesses in the Mandalika SEZ
- Supervise and control the operations of SEZ Mandalika
- Submiting the operational report of the Mandalika SEZ to the Regional Council
- Provide various types of licensing services related to the implementation of business activities, starting from establishing, running, and developing a business in the Mandalika SEZ
- Supervise and control the operations of SEZ Mandalika
- Submiting the operational report of the Mandalika SEZ to the Regional Council
- Manage the SEZ Area and submit the report to the
Galang Batang SEZ

- Build an area with various facilities needed by business actors, such as water, electricity, regional roads, waste management, and others
- Manage the Galang Batang SEZ Area and submit the report to the Galang Batang SEZ Administrator
- Looking for investors who will invest their capital in the development of the area, as well as conducting business activities within the Galang Batang SEZ

Business

- Carry out its business activities by the license granted
- Carry out obligations related to provisions for business actors in the Galang Batang SEZ
- Contribute to the development of regional and national industries, especially in the bauxite processing industry

- Build an area with various facilities needed by business actors, such as water, electricity, regional roads, waste management, parking lots, places of worship, beach facilities, Mandalika Bazaar, and Balawista.
- Manage the Mandalika SEZ Area and submit the report to the Mandalika SEZ Administrator
- Looking for investors who will invest their capital in the development of the area, as well as conducting business activities within the Mandalika SEZ

SEZs Administrator

- Promote to potential investors
- Looking for investors who will invest in the development of the area and conducting business activities within the SEZs.
- Coordinate with agencies/agencies related to the SEZ area development plan
- Coordinate with Central Ministries and Institutions to assist the construction of the Sorong SEZ

- Carry out its business activities by the permits granted as business activities before entering the SEZ
- Completed the construction of facilities for its business activities
- Transfer of knowledge and technology to domestic workers through Education programs

Contribute to the development of regional and national industries, especially in the bauxite processing industry
Based on the table above, the actors' roles in developing the Galang Batang SEZ, Mandalika SEZ, and Sorong SEZ can be identified. Each actor is expected to carry out his role optimally, considering that SEZ development is in the interest of all parties and cannot be carried out by only one or two parties. So collaboration of various parties is needed so that the national strategic program can be successful and benefit all parties. However, based on the study results, it can be seen that not all actors have carried out their roles optimally and still have obstacles in carrying out their roles. For example, the first actor is a representative of the Government, namely the National Council of SEZs. In general, the leading roles that are the duties and authorities of the National Council in developing SEZs have been carried out. However, in implementing its duties and authorities, obstacles were found, as explained by the Secretary of the National Council, that there are still many obstacles related to land issues that impact delays in development in the SEZ Area.

The second actor who has a role in the development of the SEZ is the Regional Council of SEZs which represents the Provincial Government and Local Government. Following its duties and authorities, the Regional Council provides quite a lot of support to SEZs in the form of the formation of SEZ Administrators who carry out one-stop integrated services for various required permits. For example, provision of infrastructure outside the zone and toward the zone, providing fiscal incentives in the form of regional taxes and regional levies according to regulations, promoting investment to foreign and domestic investors, providing public service

| University | Provision of skilled workers according to the needs of the Galang Batang SEZ industry | Provision of skilled workers according to the needs of the Mandalika SEZ industry |
| MSMEs | No role has yet been given to MSME actors in Bintan Regency to participate in developing the Galang Batang SEZ Area. | Participate MSMEs in the development of the Mandalika SEZ Area by filling out the Mandalika Baazar |
| | | | There are no SEZ activities that provide the opportunity for MSMEs to play a role. |

Source: Processed by the author (2021)
facilities, forming a task force for accelerating the development of the zone as well as participating in the resolution of land disputes.

The third actor is the Administrator of SEZs, who carries out the service and supervisory role established by the Zone Council according to Law no. 39 of 2009 concerning Special Economic Zones. Administrators carry out their duties and authorities following existing laws and regulations. They start by providing services in managing licensing facilities for Management and Business Actors, carrying out supervision related to the implementation of development and business activities within the SEZ Zone, and making periodic reports to the Regional Council and the National Council.

The fourth actor is the Development and Management Business Entity. PT. BAI is the proponent of the development and the Management of the Galang Batang SEZ, a purely private sector in collaboration with investors from China. Extensive investment support is the main factor in implementing rapid regional development. However, until now, only one investor has invested in the Galang Batang SEZ. In the long term, it can be problematic if existing investors no longer survive to run their business in the Galang Batang SEZ.

The ITDC Mandalika SEZ is designated as management. Experience of ITDC in building and managing tourist areas has been going on for a long time since 1968, which began with preparing a master plan for the development of the Nusa Dua area of Bali. Since 2014 with a new management team and a name change from the previous Bali Tourism Development Corporation (BTDC) to Indonesia Tourism Development Corporation (ITDC), ITDC, as an SOE in the tourism sector, has been trusted to manage various tourist areas in Indonesia, including the development of the Mandalika SEZ.

The fifth actor in developing SEZs is business actors, namely companies that run their SEZ operations. PT. BAI is the sole business actor in the Galang Batang SEZ, mining bauxite and processing it into alumina powder. PT. BAI in SEZ is going well, so on July 02, 2021, it has succeeded in carrying out the first export of alumina powder products to Malaysia.

In the Mandalika SEZ, the business actors involved are companies engaged in the tourism industry, such as hotels. These companies have started to build hotel/lodging facilities to support the activities of the MotoGP event, which was held for the first time at the Mandalika Circuit. Meanwhile, in the Sorong SEZ, the company currently running its business in the area is PT. Semen Gresik (Semen Indonesia Group) is engaged in the cement packaging business, PT. Henrison Inti Persada is engaged in wood and palm oil processing and PT. Bumi Sarana Utama (Kalla Group) is engaged in the bulk asphalt industry.

Several other companies interested in investing in the Sorong SEZ area are PT Gag Nickel, whose business plans are nickel smelters, nickel derivative products in ferronickel, and stainless steel. Next PT. Pelindo IV plans to build a jetty, warehousing, logistics, trestle, causeway, and reclamation. PT. Raja G & G International also plans to invest in the Sorong SEZ in the port and fisheries industry. Other companies interested in investing are PT Temasek Perikanan Internasional, which is engaged in constructing shipyards and PT. Inti Kebun Makmur with its CPO Bulking Terminal, Kernel Crushing business.

The sixth actor is University. Universities have not yet received a position to play a more strategic role in SEZ development. However, the existence of the Education zone as one of the zones in the SEZ is essential to carry out its role as a provider of human resources who have the qualifications needed by business actors. Also, research and innovation activities can be part of efforts to downstream research and innovation products produced by universities to then commercialized by business actors. This collaborative effort is undoubtedly essential so that all parties are involved in SEZ development. Meanwhile, the involvement of Universities
in the Mandalika SEZ is only limited to providing jobs to assess the land used, not yet reaching the collaboration that involves all stakeholders.

The seventh last actor is Micro, Small, and Medium Enterprises (MSMEs). The existence of MSMEs in SEZ is regulated in Article 3 paragraph (3) of Law no. 39 of 2009 concerning Special Economic Zones states that in each SEZ, a location is provided for micro, small, medium enterprises (MSMEs) and cooperatives, both as business actors and as supporters of the activities of companies within the SEZ. This determination is, of course, with the intention that SEZs continue to pay attention to MSMEs and Cooperatives as community businesses that need to be given space and opportunities so that All local communities can feel SEZs.

Seeing the involvement of SEZ development actors as described in the explanation above, the role of Higher Education and MSMEs is an actor that is still minimally involved in SEZ development. Universities are potential actors to be involved in the development of SEZs. The actors can carry out strategic roles. For example, universities can conduct research and innovation. The research and innovation produced by universities can be used as material for product development for business actors in SEZs.

5. Determinant Factors

Based on the identification of the involvement and role of each actor in the development of the Galang Batang SEZ, Mandalika SEZ, and Sorong SEZ, it can be further analyzed the factors driving the SEZ development. From some data and information that have been obtained through focus group discussions, group interviews, and in-depth interviews, as well as document studies conducted by researchers, further processing and analysis of the data and information is carried out. Data processing is done by coding or classification/grouping the data obtained. The coding process is carried out in three stages: open, axial, and selective. From the results of focus group discussions, group interviews, and unstructured interviews conducted with stakeholders, the data obtained are compiled in the following coding.

**Table 4. Open, Axial, Selective Coding**

<table>
<thead>
<tr>
<th>Open Coding</th>
<th>Axial Coding</th>
<th>Selective Coding</th>
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<tr>
<td>• As the Regional Council, the Regional Government assists in developing the SEZs following its functions.</td>
<td>• Local Governance</td>
<td>Collaboration, Innovation, and Governance</td>
</tr>
<tr>
<td>• The Governor has a vision for SEZs development.</td>
<td>• Collaboration</td>
<td></td>
</tr>
<tr>
<td>• SEZs Administrator has been established.</td>
<td>• Innovation</td>
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<tr>
<td>• There is a master plan for the development of the area</td>
<td>• Participatory policies</td>
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<td>• Leadership</td>
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• University involvement is only limited
• In collaboration with University, the Provincial Government has developed a Techno Park.
• Area Development by involving the community
• The lack of skilled human resources that meet the needs of the SEZs causes the search for human resources from outside the region.
• Educational institutions are still lacking.
• Regional leaders have visionary ideas.
• Availability of road access infrastructure throughout the region and especially to the SEZs
• Available public service facilities in the area
• Abundant natural resources
• Available seaports in the area
• Airport available
• Improved regional economy
• Local Government support to accelerate regional development
• Fiscal incentive facilities are provided to SEZs managers and business actors

- Skilled HR
- Visionary leader

- Infrastructure facility
- Accessibility
- Natural Resources

- Government Support
- Incentives
- Trust
- Industrial Focus

- Infrastructure, Natural Resources, and Location

- Incentives and Trust
• Encouraging areas outside the SEZs Area to prepare to catch tourists
• Foreign investors’ confidence in Indonesian entrepreneurs

Source: Processed by the author (2021)

Several essential concepts can be drawn up from the data processing results in open coding, axial coding, and selective coding, which are the driving factors in SEZ development. Furthermore, these factors locally become factors that are considered necessary for the development of SEZs, namely Collaboration, Innovation and Governance, Superior Human Resources, Natural Resources, Infrastructure, and Location, as well as Incentives and Trust.

6. Improvement Strategy of Competitiveness

Two decades of Special Economic Zones in Indonesia have been running by producing 19 (nineteen) SEZs spread over 15 (fifteen) Provinces and 18 (eighteen) Regencies/Cities. SEZ is an area with specific boundaries within the jurisdiction of the Unitary State of the Republic of Indonesia, which is determined to carry out functions with certain economic benefits. The main objective is to create economic growth and equitable development and increase the nation's competitiveness. SEZs are areas with geo-economic and geostrategic advantages and functions to accommodate industrial activities, exports, imports, and other economic activities with high economic value and international competitiveness. The presence of SEZs is expected to build capacity and economic competitiveness at the regional and national levels through value-added and value-chained industry and tourism (National Council of SEZs, 2020).

In the second decade of SEZ development, the Government transformed SEZ policy by emphasizing its orientation on the realization of SEZs, not only emphasizing regional economic growth acceleration and equitable development nationally. Hence, it is called the First Generation of SEZs and encourages the establishment of SEZs that can build added value on mastery of technology and human resources, which are the orientation of the Second Generation of SEZs.

In order to support the target of the Second Generation of SEZs, which is the orientation of future SEZ development, the right strategy is needed to attract domestic and foreign investors to invest their capital and run their business in SEZ development. Both the First Generation of SEZs and Second Generation of SEZs are directed to encourage the realization of competitiveness, which achieves a better quality of life for the community. Therefore, the shared vision and mission to build the competitiveness of SEZs need to be the epicenter in formulating policies and strategies in various fields related to SEZs so that all sectors are in line to make it happen. Therefore, it is necessary to design a competitiveness-oriented strategy as the main driving force influencing other strategies. Competitiveness-driven strategy is prepared based on the research findings, which are the driving factors relevant to SEZ development. The following is a competitiveness driven strategy model that has been compiled:
Based on the picture above, six strategies strengthen SEZ's competitiveness: an innovation strategy, a collaboration strategy, a human resource strategy, a governance strategy, a location strategy, and an incentive strategy. The following is an explanation of the six strategies:

6.1. **Innovation Strategy**

An innovation strategy for the development of SEZs is essential to have added value and compete with SEZs in other countries. Competitiveness-oriented strategies can be carried out through technological innovations and managerial or administrative innovations. The Government, Development and Management Business Entities, and Business Actors can form Research and Development institutions or involve Universities to conduct research that can produce discoveries related to the industries developed in SEZs. For example, China has developed its modern technology industry (high-tech industry) by building a science park and collaborating with universities to conduct research oriented towards innovation/discovery, which is expected to encourage competitiveness for SEZs.

The future SEZ development as the vision of the Second Generation of SEZs can build added value for mastering technology and produce superior human resources. SEZs that use and produce modern technology (high technology) are targets for future development as developed in silicon valley. Modern technological innovations (high-tech) are primarily carried out in universities in Indonesia. The downstream results of the findings and innovations made by researchers can be developed in SEZs.
6.2. Collaboration Strategy

The Collaboration Strategy is closely related to the previous strategy, namely the innovation strategy. To build competitiveness, it is not only individual work because it will be closely related to the activities of other parties, but so intensive cooperation is also needed between the parties involved. In collaboration, each entity shares information, resources, and responsibilities to jointly plan, implement and evaluate program activities to achieve common goals. SEZ is a common interest that requires collaboration with various parties, especially the three actors in the Triple Helix, namely Government, Business, and Universities. Meanwhile, the involvement of universities is still very minimal in the SEZ development program.

Seeing the needs and challenges of future competition, a collaboration between the Government, Businesses, and Universities is a must to develop SEZs. University's involvement will be closely related to Research and Development, the preparation of skilled workers who are expected to be able to fill the needs of superior human resources in SEZs. As well as resolve problems experienced in the development of SEZs through studies conducted to produce a breakthrough solution that suits the needs.

6.3. Human Resource Strategy

The need for superior human resources in increasing competitiveness is a significant prerequisite. The current competition is not only at the product level but also at the people behind the product itself. Therefore, starting from a visionary leader to a skilled workforce is necessary for developing SEZs. Leaders must create an appropriate market orientation model to increase performance and competitiveness. Policymakers should also make improvements or develop their orientation through education and training and develop themselves in knowledge and technology (Hidayati, 2020). Human resource strategies that can be carried out to meet the needs of SEZs are not only during recruitment but during the education stage. Therefore, it is necessary to prepare a link and match between the industrial world, including SEZ, and the world of education.

The search for talented workers for modern technology (high-tech) both from within and outside the country can be a strategy that can be done. SEZ's competitiveness with the products produced and innovations created as inventions can be offered to the market. In addition, cooperation with universities to prepare qualified, skilled workers is a strategy that needs to be carried out so that the workforce needs are following the qualifications needed by business actors in the SEZ.

6.4. Governance Strategy

Governance related to SEZ development is inclusive in dimensions. Regarding the Chinese Government's critical success factors in developing the Shenzhen SEZ, almost all factors are governance-related. As stated by Rahayu and Juwono (2019), governance is concerned with using power to manage resources and achieve state goals to realize the community's welfare. Based on the research results conducted by Zeng (2011), the key to developing SEZs is a strong commitment of top leadership to lead directly in program implementation seriously. The success of the Shenzen SEZ, among others, is the seriousness of the Government's top leadership in China is leading the development of the region. However, flexibility in applying the rules and granting autonomy to local authorities to manage SEZs is still given.
The Government's proper role in the SEZ development process is also an important thing to do. Starting from the Central Government, the Provincial Government to the Regency/City Government together, it is necessary to intervene to oversee the implementation of the SEZ development program. Together we look for breakthroughs that can solve the various obstacles and constraints experienced, for example, several SEZs that until now have not been able to develop their areas. Referring to the steps taken by the Chinese Government in developing the Shenzhen SEZ, carrying out institutional reforms that are gradual so that the entire system can run well is a strategic step that can be taken as part of a governance strategy.

6.5. Location Strategy
Location within a business can contribute to competitiveness. A strategic location will provide many advantages for business actors, as is the case with selecting SEZ development sites. As a specific location, SEZ provides efficiency for business actors in their business transactions through advanced infrastructure and various supporting facilities to increase company competitiveness. Today's global competition makes business location decisions strategic. The choice of SEZ development location will determine the attractiveness of investors. Empirical studies show that SEZs in developed areas, where agglomeration is more likely to form as a business ecosystem, prove to be more successful than those in less developed areas (Singh and Sanjeev, 2019).

This finding aligns with the current SEZ development policy, which opens up space for developing SEZs in Java. Even with more complex requirements compared to the development of SEZs located outside Java, entrepreneurs' interest in building SEZs on the island of Java is very large. The reason is the availability of good infrastructure and a conducive business ecosystem. However, it is considered that SEZ will be difficult to develop if it is established in an area with a poor industrial base or there is no business activity in that location. Therefore, a challenge for the Government is to realize equitable development through the development of SEZs outside Java, seeing the enthusiasm of business actors who prefer to develop their businesses in Java.

6.6. Incentive Strategy
Providing incentives for management and business actors in SEZs is an attractive investment attraction. In general, incentives can be in the form of fiscal incentives and non-fiscal incentives. Fiscal incentives are related to the ease of taxation and import duties on goods and funding support provided to SEZ business actors with specific requirements as regulated in-laws and regulations. Meanwhile, non-fiscal incentives are related to business activities, such as licensing and ease of service to the available infrastructure facilities.

Based on the research conducted by Tarigan (2019), the most crucial incentive in the SEZ is the availability of integrated infrastructure, especially seaports, rail lines, and roads that connect SEZs with international trade routes. Provide time, cost, and energy efficiency that must be spent with the availability of integrated infrastructure with SEZ. Likewise, the research conducted by Naeem et al. (2020) states that incentives are the biggest attraction for investing in SEZs. Industry players believe that incentives are at the core of the attractiveness of SEZs, so it takes a longer time to provide them. Based on these two studies, creating an incentive strategy that attracts business actors to invest is an advantage that can be done by providing various facilities, both fiscal and non-fiscal.

7. Conclusion
In the second decade, the development of Special Economic Zones will determine the success of SEZ development in Indonesia in the future. The first decade passed is the initial stage that becomes the basis for going further and faster to achieve the expected goals. The first ten years are the stages of introduction, development of regulations, and system formation, which are expected to be appropriately implemented in the next phase. Based on the data analysis, there are driving factors in the development of Special Economic Zones: Collaboration, Innovation, Governance, Superior Human Resources, Natural Resources, Infrastructure and Location, and Incentives and Trust. Therefore, a competitiveness-driven strategy can be drawn up as an epicenter in formulating policies and strategies for developing SEZs in Indonesia: innovation, collaboration, human resources, governance, location, and incentive strategies.

Comparing SEZs in Indonesia with SEZs in China in different situations and times will certainly invite differences of opinion considering some indicators and environmental situations which are very different. However, to review the achievements that SEZs in Indonesia have obtained, it is undoubtedly essential to do so in order to learn and further examine the steps that need to be taken. There are several challenges that SEZs will face in Indonesia, and of course, anticipatory steps are needed to be able to survive and achieve SEZ development goals, including:

1. The increasing growth of SEZ development worldwide impacts competition and reduces the value of additional benefits from SEZ development.
2. The prolonged impact of the COVID-19 pandemic has delayed various development and investment plans that had previously been agreed upon.
3. The institutional structure is considered too long and convoluted, making it difficult for investors, so there needs to be a debureaucratization step.
4. Coordination between related institutions both at the central and regional levels is often not developed. As a result, policies set at the central level are often not understood by agencies at the regional level.
5. The provision of incentives to investors needs to pay attention to the needs and offers made by SEZs in other countries to have attractiveness.
6. Infrastructure development, especially those outside SEZs, which are the responsibility of the Government, is still considered very lacking and of low quality, such as roads, bridges and others.
7. Determination of SEZ locations that are not attractive to investors needs serious attention, so it is necessary to open investment space in areas with available supporting facilities such as ports, airports, land transportation facilities, and a conducive ecosystem.
8. Access to international markets is essential for SEZs, so the importance of SEZ locations to pay attention to international trade routes.
9. Employment-related to wages, the status of workers that need a mutual agreement so that Indonesian workers have competitiveness.
10. Land issues that often hinder SEZ development efforts need to make more flexible rules and collaboration with the community to support SEZ development efforts.

References


